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ORIGINAL ARTICLES.

MAN THE MASTER.*

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AT no period during the history c the past, have the practical results growing from the ceaseless evolution of thought been more apparent than during the past decade. Through the ages of conflict, since the first dawn of life upon our world, during which nature was black with convulsions and struggles, and the earth a vast battle ground, in which the forces of good were ever contending with those of evil, truth, justice and humanity have been slowly evolved from the wild whirl of conflicting passions, the hereditary transmission from our brute ancestors into clearer and stronger intellects and nobler and more harmonious lives. Through this conflict of the ages, we are slowly learning that this world is our inheritance and that the responsibility for human progress rests on human shoulders, and if that progress falters or stops, the fault is ours alone. We are now realizing the fact that we are not mere helpless pawns in the blindfold game of necessity, and what at once seemed the hard remorseless forces of nature can be made obedient to our will and either do our bidding or be deprived of the power of harm. Slowly and yet surely, step by step, man is being educated up to the mighty fact that life is a ceaseless evolution from the lower to the higher forms, and that it advances higher and higher, leaving behind it the crudities, the imperfections in form and intellect of its brute heredity, until it shall have passed out of its old plane into that higher spiritual life when it shall become in reality like the "Sons of God," the material part no longer the master but doing the bidding of the divine will. How the beauty, the simplicity and the grandeur of the mighty plan of creation unfolds itself as we begin to comprehend that instead of life being a new miracle, it is simply an unfolding, a progression, ever advancing upward into higher and more beautiful forms, becoming more and more perfect, as its weaker portions, without the strength of progress, slide backward, losing the power of propagating its species and becoming extinct, as the harmonious laws of life are heeded or violated. Fully realizing the fact that man was intended to rule nature and not be crushed by her, he is taking every year a firmer hold of his inheritance in those practical scientific developments by which he is enabled to control, more and more, the natural forces about him and make use of them to correct the ills of life. For ages men trembled as the thunder rolled through the heavens and the lightning sent its death dealing bolt to the earth; but when the scientific brain of Franklin drew the electric fluid harmless to the earth with his kite and made this all powerful fluid subservient, to a certain extent, to the will of man, he multiplied ten thousand fold the powers of labor and opened a limitless avenue for the benefit of the world.

The first clue to that subtle force, came from the amber which the Greeks in their mythology pictured as the tears of the Heliades, changed by the all-powerful Jove into translucent amber, as they mourned the death of their brother Phæthon, Son of the Sun. The amber soul of the Ancients is recognized in modern science as that magnetic electric force which pervades all nature, and which, in some way or other, is at work in almost every process of life. The more closely the nature of electricity, in its varied forms, is studied, and its phenomena comprehended, the nearer we get to the secrets of life, of power, of harmony and the annihilation of time and space. The great problems which arise, one after another, in the progress of events, will be solved in comprehending and utilizing the mysterious powers of this all pervading agent, including the nature of earth and atmospheric currents in the production of atmospheric changes in the repression or destroying germs of disease, in the creation or destruction of those conditions which give rise to the pestilence which "wasteth at noonday," or to strong and vigorous health. In some unknown manner solar energy acts and reacts upon the electrical and magnetic conditions of the earth, by turns stimulating and relaxing its activity in correspondence with its own alternations.

Such correspondence is part of the vital union which subsists between the various members of our system. No one of them can exist alone or is independent of the other. They form together a living and a co-operative whole, the same life flowing through all and influencing all. The rotating earth may be regarded as a great magnet, wrapped in the conducting strata of its crust, while the upper layers of the atmosphere complete the circuit. One effect of the forces brought into

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play is, that positive electricity is constantly expelled from the earth's surface into the higher atmosphere, the earth itself remaining negatively charged. Another is that the expelled positive electricity travels without ceasing from the equator to the poles. This accumulation of opposite electricity in the earth and in its atmosphere can not go on indefinitely; it must be attended by some process of neutralization, as thunder storms can only occur under favoring meterological condition. The recomposition of the positive fluids of the air with the negative fluids of the earth, by these violent outbursts, can only be partial, and to a limited extent. The greater part of this expelled electricity flows silently poleward, constantly reinforced by fresh supplies gathered "en route" and waiting an opportunity for relief from increasing pressure. Over a ring shaped space around either pole the electricity of the upper air flows to the earth; and it is these concentrating currents, made visible through peculiar conditions of the atmosphere, which light up the polar heavens with their weird light flashing towards the zenith like the hosts of the mighty armies or great waves of fire, telling that the earth is not dead or a cast off member of the solar system, but thrills in harmony with and moves obedient to the great life sustaining luminary.

The terrible "grippe," which during the past year, starting in Russia, circled the world, could be traced to the electrical disturbance produced in our atmosphere by the mighty convulsions on the surface of the sun, the effects of which could be seen through the telescope. The molecules of oxygen, it is known, may be broken up and ozone produced by an electric current passing through them. While ozone in definite proportions is all important in its life giving power, in the too large proportion which might be produced by high electric tension it becomes a powerful irritant, as has been frequently demonstrated, producing depression of nerve force, increased heart's action, irritation of mucus surface, giving rise to pneumonia, bronchitis, catarrh and sometimes even paralysis. It was found that during the prevalence of this epidemic there was an excess of ozone in the atmosphere, and this also has been found to be the case whenever pneumonia has prevailed as an epidemic.

The sudden development of strong earth currents, which may effect vegetation and animal life, has been admirably illustrated in a storage battery recently constructed, in which it is demonstrated that heat can be directly converted into electricity in a galvanic cell. In a cell is placed an electrode of tin and one of carbon, in a liquid which at ordinary temperature will not attack either; but as soon as the liquid is warmed, chlorine is set free and attacks the tin; then the current starts and continues until all the tin is converted into chloride. Now, if the cell is allowed to cool, the chlorine releases the tin and returns to the liquid, and so the cell regains its original state. The chlorine is in fact a chemical pendulum, swinging from liquid to tin and from tin to liquid as often as the heat is applied and removed. With the earth a great magnet, and its crust full of storage batteries, ready to pour out their energy and their power at the command of the sun, and the chemical action which a variety of causes may set in motion, what, unchecked and uncontrolled, are elements of discord, disease and death, under the guiding hand of science, may be utilized for good, and realize in the transmission of thought and power from continent to continent the truth of the Rosecrucian philosophy and the dream of the Theosophist. If, as science has shown, the whole solar system is bound together by electric influence, each part a necessity of the whole, we may possibly find in the old astrology, as in the amber soul, the germ of a great truth which will revolutionize thought and place it on a higher plane.

It has been said that in every vein of our bodies rages the deadly strife between the corpuscles of life and the bacteria of death, and that in each human body the battle of life is hourly fought anew, but as we learn more of the processes of life and death and the illimitable resources of nature, the death dealing malaria and parasites slowly disappear, the deserts are fertilized, the climate ameliorated and man slowly but surely, as the part of God which is within him predominates, becomes the master of nature and the regenerator of the world. Man co-operates with God, as he is a part of God, and helps on the movement of the creative purpose, atom by atom, as he strives to mend and guide humanity, to investigate its sorrows, to lessen its woes, to soften its vices and to strive for its well-being, and any work, for controlling the powers of nature, for evolving our race to higher planes, will be done by man and through man. The God power, which is in him, will work only through him and just as fast as he wills.

We beget our own destiny and need not accuse Providence of evils which we ourselves have created. The laws of life are their own avenger, and the human race, in one sense, its own Providence. It decides for itself the question of peace and war, health and pestilence, plenty or famine; all the governing and propelling powers are in man, and on him rests the burden which in times past was thrown upon Providence.

During the ministry of Lord Palmerston an epidemic of typhoid fever swept over certain districts of England. A delegation of priests waited upon him asking him to appoint a day of fasting and prayer. Palmerston replied: "Deity is not the God of the shiftless; the remedy lies in your own hands; go home and look to your drains." They did so, and the pestilence ceased.

Relief came, not through the robed priest, the incense floating through aisle and chancel or the anguished prayer, but in the clear, cool, scientific brain which sought out and remedied the cause of the pestilence. Recently typhoid fever broke out in a large village, of a peculiar and malignant character. The water from a shallow well, which furnished the people with water for both cooking and drinking, was analyzed, but chemistry failed to detect the poison. Two grammes of lithium salt were placed in an urinal not far from the well, and in two hours ft was detected by the spectroscope in the well water by analyzing a ray of light in which a small portion of the water was made luminous, the spectroscope being so sensitive to the salt that it is able to detect even the 40,000,000th of a grain.

For a time the vineyards of France, upon which the nation depended for a large portion of its wealth, seemed to be on the verge of destruction; the grapes were no longer perfect, the vines were blighted, and ruin stared in the face the large landed proprietors and the poor tenants. In 1868 Pasteur discovered the cause of the destruction of the vines in the parasite phylloxera, which opened a way to that vigorous treatment which has saved France millions of dollars. A few years later the same great scientist discovered the bacilus of the charbon or splenic fever, which was decimating the cattle herds of the world, killing them off by thousands, and still later Pasteur has placed the world under a lasting obligation to him by discovering, in innoculation, a remedy for the dreaded hydrophobia. Statistics show that the number of deaths after treatment have been only 53 in 7,893 cases, while before Pasteur's great discovery the average deaths were not less than 15 or 20 per 100. In a word, at the present day, a person contaminated with the virus of rabies and innoculated in time, has hardly more than a chance of one-half of one per cent. of going mad, while under the old cauterization treatment his chances were from one in seven to one in five, and of the terrible tortures of such a death the strongest imagination can have no conception.

In my own profession the therapeutic action of drugs is so little understood and forms so small a part of the real work of the physician that it is rapidly ceasing to exist as an element of antagonism in the profession, but the study of the physiological and pathological effects of drugs upon the healthy organism is from the same standpoint and along the same lines, and the results are utilized according to the experience and best judgment of the individual.

The lines of thought in working out the great problems of human misery and suffering, of life and death, are rapidly converging and the solution will be reached in the unfolding evolution of ages, not by a single mind but by the thousands of earnest souls whose minds have been purified and sharpened in the process of evolution, as they drank more and more deeply of the harmonies of nature. The drift of public thought is more and more away from the antagonisms of the schools and the arbitrary dictates of would be autocrats, and along those simple lines of work every step of which can be supported by tangible facts. Within the past few years a whole class of diseases, including cholera and the specific fevers, such as typhoid, typhus, intermittent and yellow fever, have been traced to a *contagium vivum*, to bacteria and to organized forms, and the prevention suggested in habits of life and the remedy in internal antiseptics. As soon as the ferments which are the active agents of digestion were isolated, and their modus operandi defined, the treatment of a large class became in a measure hygienic, and were relieved by supplying the deficient ferment. In the modern development of biology, medicine has acquired a scientific basis, has revolutionized and has altered every relation of theory and practice and is fast obliterating the antagonisms of the schools, and bringing the whole medical profession into a closer relationship. While medicine was almost exclusively empirical its effects could only be deduced from the phenomena of its practice, but as scientific progress disclosed the origin and nature of morbid processes, the doctrine was enabled to predict the source and the significance of the phenomena. The developments of the knife, the microscope and the spectroscope and a careful scrutiny of the physiological action of drugs and hygienic influences, are not only rapidly doing away with the exclusive dogmas but are teaching the physician that his profession comprehends all sciences and gathers within its focus the rays of light from every field of research, from every domain of nature. Since Claude Bernard disclosed the Glycosurial center in the brain or that irritation of the floor of the fourth ventrical gives rise to diabetes or sugar in the urine, every process in the system is traced to a certain nucleus in the nervous system, a center, which governs the working of the organs. Neurologists have located with tolerable correctness the different faculties of the mind in the brain, as for instance, a pressure upon almost any portion of the brain may give rise to epilepsy, which is speedily relieved if an operation can be performed which will relieve the pressure. That exceedingly annoying trouble aphasia, or a lack of co-ordination of words, can be traced in most cases to a lesion in the third convolution of the left frontial lobe of the brain, the area governing speech being almost entirely limited to that lobe. The curious effects produced by this disease are illustrated by a distinguished clergyman, who wished to say to a friend, "I am very glad to see you," startled him by saying with a smiling face, and in the most cordial manner, "go to sheol."

A good definition of some forms of insanity

would be correct reasoning from false premises. The portion of the brain which formulated certain premises might be diseased, while the reasoning faculties would be perfectly healthy. Insanity might thus be confined to a single subject arising from a disease of a certain locality. It will be seen, then, that so far as medicine is purely scientific, its practice is dictated by the causes rather than the effects of disease, and operates not from the various points of the periphery towards the center, but from the center itself, and just as the science of medicine becomes more biological, it sees in the phenomena of disease only aberrent life processes, and its methods of cure become adaptations and modifications of the common laws and conditions of life. It is not generally known how in thus broadening its foundations, practical medicine has given to the ordinary forces of life positively curative functions, and makes an increased claim upon the active and intelligent co-operation of the patient. Thus medicine is placed at the very seat of the control and energy of the body, and operates upon the whole chain of effects from the central cause. Its practice also from a necessity become more purely biological as the entire processes of the body lie thus in his hands. Modern biology, as a physical science, knows nothing of life in any animistic sense, and only traces its operations, its manifestations to the operation of material forces, except, perhaps, in development from the embryo. Every other process in the body it seeks to explain by strictly mechanical, chemical and electrical forces, and life is described as the balance, the focus, the resultant of these forces, merged into unity by an every brooding influence, to which it gives no name. They form the variegated spectrum which blends into the white light of life. But life is something more than the play of mechanical, electrical and chemical forces, and the question, what is life? what is mind? what is soul? have been studied in the laboratory with the knife and with chemical tests, with the spectroscope and the microscope, on the mountain top away from all life save that which filled the air and flows down from the stars, in the busy world, where mind meets mind, and thought is sharpened with thought, in the cloister cell, in fasting and prayer, but with all the eager questioning and striving, no mind has as yet penetrated the mystery or unlocked the secret. We have reached only the great fact that the whole living world in its primary and fundamental form is simply and individually a mass of protoplasm, in which it is impossible, by any power we now possess, to discern form or structure. Back of this germinal matter, this primary element of animal and vegetable life, we know nothing. Independent living forms exist in the depths of the sea, and on land clinging to the rocks and floating in the water, or caught up by the wind and carried hither and thither, which hardly ever advance beyond the simple structure of protoplasm, but all life in its higher forms follows this line of development, beginning its separate existence as a nucleated cell, which by division forms a mass of nucleated cells. The parts following different laws of growth and multiplication, give rise to the rudiments of the organs, and these rudiments, possessing a line of multiplication and metamorphosis peculiar to themselves, are developed into the perfect structure. The particle of protoplasm, which is developed into the higher animal life, a life which for a time at least holds in its embrace the mind and the soul, is, so far as we can discern, even with the highest powers of the microscope, composed of the same material, and is precisely the same in form and structure as that which advances but little above the primary cell or develops into the varied forms of animal and vegetable life. The beginning of the line of development, so far as our own knowledge extends, is the formation of the first particle of protoplasm, for back of this we know absolutely nothing.

Subject the physical properties of a plasson body, which is simply unorganized protoplasm, to chemical analysis, and we get in every 100 parts 54 per cent. of carbon, 21 of oxygen, 16 of nitrogen, 7 of hydrogen and 2 of sulphur. This is all we can find. But the protoplasm thus organized is dead matter, incapable of any of the functions of life. Bring together by some chemical process all the component parts of the plasson body, so far as they have been ascertained, and do we get living protoplasm, something which will reproduce itself, with the possibility of gradually developing into an organized being? Chemistry has imitated nature so closely in its manufacture of organized compounds as to produce the very thing copied from nature excepting the all-important one that it was dead and with all their skill they were powerless to endow it with life. Physics and chemistry have combined to manufacture an egg in size, in weight, in taste and composition, atom for atom, precisely like the one which contains the germ of life. But they have never been able to manufacture an egg which would hatch. There is, then, there must be, a vital principle, a life which is the cause and not the consequence of organization, which exists apart from matter, which precedes the organization of matter and combines together the carbon, the nitrogen, the hydrogen and the sulphur to form living protoplasm, the earliest form of matter science has yet discovered, endowed with life and capable of reproducing itself, of subdividing itself and developing step by step into organized beings. The formation of the first particle of protoplasm, to us the genesis of organized life, is just as mysterious, just as much a miracle, as would be the creation of each distinct species of vegetable or animal life, separate and distinct.

How grand and beautiful that plan of creation,

which proceeds in lines of the greatest order and harmony, according to a distinct design, in the gradual development of animal life, from the lowest to the highest plane, each stage a preparation for a higher one, the soul form becoming more complete as the gray portions of the nervous system become better fitted for its entrance and growth, until in the higher forms of nerve organization—man—it reaches self-consciousness and is no longer merged at the death of the natural body, into the great spirit of life, which fills the universe, but self-conscious, a distinctly organized spiritual form, it takes with it into its purely spiritual life, the impression, the thought and the education obtained in its connection with the material form in its earth life.

We know the nervous system is composed of gray and white matter, that in the gray cells is generated the nerve force or power, which is communicated through the white cells, the telegraph lines of the body, to every cell in the complex structure of animal life. Wherever the gray matter is found, and it is found not alone in the brain, but in the spinal cord, in the ganglia of the great sympathetic nerve, and linked with the central organ, the brain, in a continuous chain through the various organs of the body, nerve force is generated, and in the atomic changes and chemical and physiological combinations, mind, with its thought and reasoning power, is evolved and brought into activity.

The three organizations, the spiritual, the mental, the physical, are so interwoven with each other, are such a trinity in one, that they can not, in this life, be separated in their influence and work. The theologian and the physician, fail alike to comprehend the grandeur of their work, the vastness of their profession, if they do not realize to a certain extent, the influence which one part has upon another in this trinity of man. We can not isolate these organizations. The growth and beauty and perfection of one, is so closely linked and interwoven with all, one helping the other, that the highest needs of the soul can only be reached by the care of all. The law of heredity is not alone confined to the transmission of human character, and the seeds of physical disorganization, from one generation to another, but, as has already been stated, goes back to the animal life, which has developed into higher forms, to man, the highest of them all.

We have reached in man at last the self-consciousness of the immortal soul. Step by step through the ages of progression and development, a form has been developed, into whose finer tissues the soul germ can enter. growing and expanding with its growth, a living part of its material elements, and when these fall away, carrying with it so much of its earth form, and the influence of its earth life, that the man we knew here, with his noble traits and self-denying acts, his aspirations for harmony and perfection, or with the malign and evil passions of his animal nature undisciplined, uncurbed, in full force, will be recognized as the same individual in the bright light of the spirit world, though divested of his material elements.

The further we advance in our progress upward, in that higher cultivation which enables the spirit, the mind, and the material body, that trinity in man, to work in harmony, the further we shall be removed from the brute creation, from all the elements of evil, from the fierce sway of animal passions, from the last traces of original sin, the inheritance of the animal world, and blend in harmony with that higher spiritual life in which we shall be, in very truth, the "Sons of God." "What I do ye may do also," said God incarnate in Jesus Christ, and when, in the evolution of ages, man as a part of God has made the forces of nature subject to his will, then, and not till then, will God be king, and man regnant.

THE BIOLOGY OF THOUGHT, WITH SPECIAL REFERENCE TO THE ALIENATION OF THE MIND.

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X. PROPHYLACTIC AND TREATMENT.

A. In Physiological Regard.

WHILE the question, whether mental disease is or is not always accompanied by bodily complications, continues to be a bone of contention, among those who delight in much ado about nothing, it may well be dismissed as settled from the mind of such scientists, as do not argue inferior points but under control of superior principles. Mind and body in health having in matter generally their point of identity, it is simply absurd to enter upon the question of a pathological dualism. Mental disease not only is never without bodily complication, but there is no bodily disease, from a common wart to *tic douloureux*, from nettle-rash to scarlatina maligna, but implicates a pathological mental concomitancy. It may occur, however, and does occur, that mental disease is extant without brain-lesion, because the assumption of a restriction of the mind to the cerebrum, which seventeen years ago Bucknill and Tuke, in the preface to their manual of psychological medicine, called an established principle questioned by none, is, if by nothing else, by the very statements of these authors proven a fallacy. The aetiology of every lunacy case, unless a directly surgical one of the brain, points to a morbid will of the individual, as the root of his disease, and with the will to the ventral cavity, where the will in its turn has the root of its existence as a positive mental agency.

A very instructive illustration of this fact gives

Maudsley:* "In the Edinburgh asylum was a general paralytic under Dr. Skae's care, who thought himself king of kings, and had other characteristic delusions of grandeur, and who was most lavish in presenting millions of money. Before he was sent to the asylum he had £1 in the savings-bank, the interest of which had risen to 3s. 4d. He always kept this sum distinct from the immense sums which he believed he had in the Bank of Scotland, and would never part with a penny of it. Moreover, he calculated interest at twenty-five per cent. on his supposed wealth, and made a mess of it, but he calculated the interest on his actual property at five per cent. and correctly." Now, then, if in mental disease the intellect as such were solely involved, that ought to have shown in perfect equality of behavior in the two directions, the real and the fictitious interest. But the madness of the man consisted in the morbidity of his will to indulge in the eccentricity which cost him nothing, and barring which there was nothing in his intellect to prevent him to reason about the bigger sum as correctly as about the small deposit of his in the savings-bank.

The circumstance, that in mental disease it is *primo loco* the will which is diseased, allows, even, of a closer diagnosis of bodily complications, than can be thought of, if all causation must be assumed as being inside the skull. As surely as the theory is an empty assertion, which arbitrarily restricts mentality to the vault of the cranium, the will of man, in which his mentality most characteristically is exhibited, is manifested according to the organs contained in his ventral cavity, and can by its peculiarities be traced to specific bodily regions. The will is altogether made up by the relation of the active organs of the ventral cavity to the passive brain, which supplies in the motives from without the negative cortical matrix to the positive ganglionic actuation. That explains the recent practice of our progressive alienists in classifying mental disease. The "clinical groups" in Maudsley's Pathology of Mind are epileptic, pubescence, self-abuse, hysterical, puerperal, climacteric, senile, phthisical, syphilitical and alcoholic insanity, a division which by Arnold was predicted in the early part of the century.†

It must be drawn from these premises the important psychiatric principle, that mental disease, as far as the intellect is concerned, is in every respect a secondary condition. It may, in a measure, be called even a chronic ailment, if the form of its actual exhibition be that of an acute attack. The brain-trouble above all is secondary, being itself preceded by the morbidity of the will, which —in its turn—is impossible without a concomitant bodily derangement. The treatment has to be therefore a constitutional one, or aim at *the regeneration of tissue.*

Hence the importance of dietetic measures, and with regard to this conclusion, we would draw the attention of the reader to a theory as to which it may be observed, in a most gratifying converging of statements to the same point, the concurrence of theoretical deduction and practical intuition. This is the beneficial effect of vegetable and farinaceous diet on the regeneration of tissue. Says Letheby, ". . . . organic matter is constantly kept in motion, for, whether living or dead, it is always in a state of molecular activity."‡ "The first studies we pursue in the chemical phenomena of life teach us that plants create, and animals destroy, organic matter."† "Starting from the mineral kingdom, as carbonic acid, water and ammonia, the elements of organic nature pass through a succession of changes, first in the vegetable and next in the animal, until they reach the summit of organization, when they again return to their primitive condition."‡ "The plant is a magazine of sun-force which has been accumulated in its parts during their development, and this force stored up in the food-material of animals is again manifested in the animal body; it is the manifold action of this force which comprises and determines all phenomena of animal life."§ ". . . . The amount of animal life which may be developed on the globe is measured by the amount of food that vegetable life has prepared for it."‖ ". . . . We may say that the chemical functions of the plant are those of reduction or deoxidation, whereby carbonic acid and water are deprived of their oxygen and moulded with nitrogen into food; while those of animals are of an opposite nature, for they destroy this food by oxidation."¶

The inferences from these premises, however, which ought to be proceeded to, were not drawn by even those, who, like Letheby, could give the statements as a summary of lectures on food, and of expositions which dwelt by preference on nature's continuous circle of a molecular motion, which exhibits its constancy by an eternal variation—"either advancing towards the highest state of organization, or retreating to the confines of the mineral kingdom,"** its *région infime.* In the public opinion of Great Britain the prejudice, which bound British preponderance in industry and warfare, mental action and physical endurance, upon roast beef and steak, is so passionately cherished, that even in the medical profession nothing short of a startling spread of Bright's

* Pathology of mind, p. 440.
† Bucknill and Tuke, l. c., p. 38.

* On Food, p. 243.
† M. J. Dumas, "The Faraday Lecture, Chemical News," XX., 4.
‡ Letheby, l. c.
§ Liebig, "Essay on the Process of Nutrition," cf. Letheby, l. c., p. 245.
‖ M. J. Dumas, l. c.
¶ Letheby, l. c., p. 244, and this theory holds good in spite of the exploded chemical hypothesis that all vegetable chemistry be synthetic and all animal analytic.
** Id. ibid., p. 2 and 3.

disease by too much lean meat* could shake the rooted belief in this popular dogma. Letheby is infatuated with the same to the extent, that he makes a statement, which goes right straight against the experience of all avocation in life which has the least reference to it. There is no sportsman but is conversant with the fact of ever so much more endurance in a horse than in any wild carnivorous animal, a fox, a wolf, etc. But Letheby states of carnivorous animals that they are "more capable of prolonged exertion than herbivorous," † and this, moreover, immediately after reporting the experiments of Vislicenus and Fick who proved that non-nitrogenous diet even is by the body made available for bodily work. The British philosopher is so engrossed with the mental and bodily salvation of his country by beef, that he allows even the national gratification, which he derives from a comparison between a stout English statesman, who by a five hour's speech in Parliament don't lose his appetite—at least not his own, although he may have spoiled that of the others—and a lank German professor, who loses his breath by a three hour's walk, reflect altogether on the loins of beeves, and the fact, that for centuries already all the oxen of the globe have in the English metropolis their trysting place.

The passion for meat-diet is to most scientists, even, a motive to passionately uphold its superiority. Letheby gives statistics of the difference of nitrogenous constituents in rice and split peas, the former numbering sixty-eight, the latter two hundred and forty-eight; he makes the statement, with reference to the Chili miners, that they "work like horses, also feed like them." ‡ But he derives particular satisfaction from the report that "the Hindoo navvies, who were employed in making the tunnel of the Boredjhat Railway, and who had very laborious work to perform, found it impossible to sustain their health on a vegetable diet; and being left at liberty by their caste to eat as they pleased, they took the common food of the English navigators, and were then able to work as vigorously." § But this statement, as bearing reference to the question of the dietetic value of a herbivorous diet, is a sophistry, the diet of a Hindoo being exclusively rice which is far below the average of nutrition in vegetarian dishes.

Statistics does not go far to settle this question any way. Statistics is overrated, and most by those who understand least to handle it. It is a popular saying, figures don't lie. But if the saying is right, people interpret it wrong. It is not the figures that don't lie, but the cyphering, provided it is done right, and as surely as a man, a lunatic even, may argue right from erroneous premises, a cyphering may be right, and yet give a wrong account. Letheby claims warlike sentiments and pugilistic propensities as the outworking of animal diet. But a very peaceable nation is that of the Netherlands, and they eat considerably beef, while there is in Germany no section, where the knife is used more frequently in drunken brawls to interrupt the continuity of human tissue, than upper Bavaria, and nowhere is the diet more exceedingly farinaceous. The *Pha-Medical Register* had a statistical notice stating that cancer in India is more frequent among the natives who live on vegetable diet, than among the English who eat meat. But the worthy who compiled this statistics left out of consideration the important fact, that the meat-eating English, on reaching the age where cancer uses to appear, leave the country and go home, constituting accordingly in India a meat-eating fraction of the population among which cancer is surprisingly met with as a rarity, surprising only to those who never in statistics draw into account other facts than those which suit them.

Chemistry is the authority to which we must refer the question of the relative nutritiousness of either, the carnivorous and the herbivorous diet. Hence the certainty that, if meat is at the head of the list, as far as nitrogen is concerned, the vegetable fibre is by far the richer, taken all together, nitrogenous constituents and hydro-carbon, and "we are far from being assured, at the present time, that the nitrogenous elements of our foods are the most important." *

There is one substance highly appreciated in meat which, it must be admitted, is not found in either vegetable or farinaceous diet. It is the meat-juice. But if this can on the one hand not be denied the quality to render meat so appetisant to those whose gustatory nerve has been trained to its estimation, it must, from the experience with its pure form, meat extract, in the sick chamber, be doubted its beneficial effect as an article of constant consumption by the healthy. Meat juice is undoubtedly the very thing which gives to meat-diet its peculiar character. It is this which causes the irrascibility of temper which in the civilized nations is a characteristicon, and the savage disposition which is met with in those meat-eating tribes who are barbarians. It is this also which causes the gluttony, which among the carnivores so much more frequently is observed than among the herbivores, whose nerves are not exposed to a similar excitant, and which has its astonishing examples, not only among hunters who sit down, four or five, to a calf of 200 lbs. and finish it, but among stylish ladies and gentlemen, who sit down to meals which just are beginning when one should think they were over.

Empirically the question of salutary dietaries may be easily settled by him who does not mind to make an honest trial of vegetarian diet after carnivorous habit. A scientific research leads to the same results. The cyclus of molecular meta-

* Milner Fothergill. † L. c., p. 71. ‡ L. c., p. 71. § L. c., p. 71.

* Letheby, l. c. p. 4.

morphosis, as given above, is a *conditio sine qua non* of healthy tissue. But meat-diet is a deviation from it; it interposes, as it were, an extra link, and retards thereby the process of rejuvenation. In eating animal fibre, man eats his like, and as such a tissue which arrived already upon the highest stage of the change of matter, where the molecules have the tendency to assume again mineral shape. There is consequently a process of retardation; the animal fibre, by being worked over again and formed into the homologous tissue of its preceding existence, is rendered weak, or given an extra tendency to decay, and hence is more liable to be diseased and to not keep in so good a working order.

An adversary of this theory might object, that beasts of prey are destined by nature for a meat- or flesh-diet, and keep healthy with it, and some, even, eating carcass. But the appearances are only seemingly in favor of this argument. To beasts of prey nature gave immunity by concomitant circumstances. The work which a lion, a tiger, an eagle, a vulture has to perform, to accommodate himself with the amount of nourishment he needs, is so enormous, especially being performed without any shelter against the inclemencies of the weather, that an oxygenation of the ingesta takes place as the like is not obtaining among men. Hunters alone form an exception; they live under similar conditions, and enjoy to a certain extent the same immunity. But that is no reason why our reasoning should not apply to the meat-eater who forms the rule of our to-day's life, a sheltered, and only too often a sedentary individual, not oxygenating his tissue sufficiently for the moderate average demands of nature, let alone the exaggerated needs of an uninterrupted meat diet indulged in to excess with all the ease of a butcher's account-book.

Again, it might be objected, that beasts of prey live in menageries and zoological gardens, and do not eat except flesh. But this objection would leave out of consideration, first, the great mortality in these institutions, a mortality which is all the greater the better the animals are fed, and, secondly, the care which is bestowed upon their ulterior hygiene, a care which to an analogous high degree is bestowed on very few human beings. Besides, the particular conditions, which, obtaining, give occasion to a revenging of the disregard of her rules by nature on human civilization, are those of an overabundance of disease-germs in cases of neglected hygiene, epidemics, or only unfavorable surroundings of some sort. Granted, even, that our apprehensions of remote cause directly of autogenous disease in meat diet be exaggerated, that much is sure, it predisposes more to disease than vegetarian diet, and creates a receptive hearth for infectious influence.

A very instructive investigation corroborating our views was instituted by physiological chemistry, and its results presented to the medical profession in a handy volume by two American physicians.* There is proven beyond any doubt the overwhelming percentage of danger by poison through the means of animal than vegetable substances. In the vegetable kingdom, the deadly alkaloid is confined by nature to certain poisonous plants known as such and easily avoided. For the animal kingdom the alkaloid is surreptitiously developed and exhibited under cover of seemingly perfectly normal conditions. The foods which our authors mention as containing poisonous ptomaines are mussels, sausage, ham, canned meat, cheese, milk, ice-cream, mouldy bread, of all which articles the latter one only is a vegetable procedence. The learned authors are induced to expressly state in their book as erroneous the supposition of entire freedom of vegetable fibre, except in the poisonous plants, from deadly alkaloids. But they do not state a single instance of vegetable fibre having been used by the adepts of the incidental laboratory work for the purpose of the chemical exhibition of ptomaines. In every case animal substance as more prolific came more handy. This holds good even with reference to the chemical work incidentally to the laboratory exhibition of leukomaines, the occurrence of which is less confined to animal tissue, but with vegetarian diet is little apt to assume a poisonous character. Vaughan and Novy, in their abovementioned work, make an instructive and highly important remark which comes in here: "In health the peptones formed during digestion do not reach the general circulation. In the liver they are robbed of their poisonous properties by being converted into globulin. But it is altogether probable that at times the liver partially fails in this function, and that the health suffers in consequence. This may be due to the taking of excessive quantities of proteids, the digestion being active and the peptones formed and poured into the portal circulation faster than the liver can convert them into globulin, or it may be that from lack of exercise or other reason the liver is tardy in its action, or torpid as we say, and small quantities of peptones pass into the general circulation. The lassitude, depression, sense of weight in the limbs, and dullness in the head, occurring in the well-fed man after his meals, Brunton attributes to poisoning with peptones. The remedy is less food, especially less nitrogenous food, and more exercise. That some substance resulting from the proteids of the food is the cause of this trouble, Brunton thinks evidenced by the fact that the weakness and languor are apparently less after meals consisting of farinaceous food only.† It is the economical balance of the body which with meat diet for reason of over repletion with

* Victor C. Vaughan and Frederick G. Novy, in ptomaines and leukomaines, or the putrefactive and physiological alkaloids.

† L. c., p. 291.

proteid substances can not help being overthrown: "The birth-rate and the death-rate of the blood-cells must be in close relation to each other in health; and some of the gravest disturbances arise from decided changes in the normal proportions of the cells (anæmia, leucocythemia)." * A poisonous condition of the body can not any more be considered as an exclusively pathological one. There are poisons which are as well physiologically produced, as they are a physiological requisite. But by keeping within physiological limits, they must remain inocuous, which they will not do if not by appropriate diet they are prevented to trespass. Vaughan and Novy's closing remark is: "The importance of the personal equation in acquiring infectious diseases is fully recognized. That the difference in susceptibility may be due to the relation between the formation and excretion of these poisons generated within the body, we think highly probable." † The same argument holds good with regard to autogenous disease.

Observations of an altogether practical nature, and as it would seem of only an inferior meaning, tell in this direction. Maudsley says ‡: "I doubt not that an acute nose might be trained to recognize insanity by its odor in some instances. The excretions from the bowels are sometimes particularly offensive." And the cause of this peculiar stink can not be doubtful, because it occurs again in the houses of our zoological gardens where the carnivores are kept, while the daintiest nose is little affected by a lasting sojourn in a horse or cow stable. The writer, who, with his family, in the course of ten years did not eat meat but perhaps a dozen times, made himself the observation, that in cases of diarrhœa even all offensive smell of the fæces was absent, and that the backhouses by their odor never give any trouble. Similarly the excretions from the navel, between the toes, under the armpit, lost their fetid odor.

It is by no means less with insanity than with other disease that these observations and deductions are of importance and come in in the treatment. Whatsoever definition of insanity be preferred, a symptom which is never failing is an intensification of feelings. It denotes the tyro in psychiatric practice, if eccentricity *tout bonnement* and in all and every case is taken for insanity. § Maudsley ‖ refutes with much common sense and deep psychological insight the popular assumption of a peculiar parentage of genius and madness. It is the very characteristicon of great wit to be free from insane taint. But if it is true that eccentricity is not necessarily bound upon madness, it is not less true that madness is unexceptionally bound upon eccentricity. In the great mind its unwonted measure appears often only abnormal by virtue of its reaching beyond the scope of the observers, while in the insane the sensibility of its transgressing of the common bounds does not stand to reason in the measure of its own argument. But there is one point, hither and thither, which is never failing. That is the exceptional drift in either. And it is this excitement of the inner man which places the hygienic dietary treatment so decidedly in the foreground of all therapeutic measures, as a cure for the insane, and a prophylactic for the eccentric, especially those in whom it is doubtful whether the seething of their brain is due to derangement or greatness. It is considered a solecism in good society to speak of cases of insanity otherwise than as nervous disease. But "it can not be too well borne in mind that nerves are conductors and such only. They *never* originate impulses." * Thus, whatever message there be in the nerves, sent up to the upper story of the cerebro-spinal system in the cortical substance, the battery from which it started is in the ventral cavity. There it is where the mischief is concocted and has its deeper seat.

If in the old pathology it was and is systematized, as a specific ailment, blood-disease, such a category is due only to faulty physiology. Insanity also, unless having direct injury to the brain as its cause, when it is a surgical case, is blood-disease, and this all the more so, because the blood wave in the brain not alone nourishes it, makes there thought, in the full sense of the word, and literally, not only metaphorically, but acts also mechanically, and is liable to interfere with the proper function of the delicate structure.

Practical psychiatry confirms this even where it seems to be opposed. Bucknill and Tuke in their Manual say † that "no physician of much experience in this department of medical science will be likely to deny that disordered states of the stomach, the intestines and the liver, do frequently constitute the remote causes of cerebral disease." But they say, they are far from being able to concur in what they call the narrow view of the veteran Jacobi and some other physicians of eminence, who were of opinion that those disordered states account altogether for the causation of mental disease. A survey of their casuistry will show, however, that by this the views of Jacobi are borne out more than their own. To begin with, we must deny the propriety of the attribute "narrow" to the views of Jacobi and his followers. It does not constitute narrowness, if the notion mind, instead of being restricted to the cranial vault, is extended to the whole body, and implicitly by this extension to the outer world. Further, not a single one of the cases which Bucknill and Tuke have on record, speaks in favor of the exception which they take against the standpoint of Jacobi. Treating of nostalgia, they give

* "Wesley Mills," a text-book of animal physiology, p. 154.
† "It is pretty well established that diphtheria can not be inoculated upon a healthy mucous membrane," Archives of Pediatrics, vi.66, p. 367.
‡ Pathology of Mind, p. 378.
§ Cf. Bucknill and Tuke, Manual, p. 406.
‖ Pathology of Mind, p. 301.

* Wesley Mills, Animal Physiology, p. 212. † P. 415.

the case related by Larrey of a soldier in the First Swiss Regiment in Russia under Napoleon I. "His state did not appear alarming to Dr. Cornac, his physician, when he first entered the fever wards. One day, however, when Larrey visited him, he was informed that the unfortunate man had committed suicide, and, hastening to his assistance, found him weltering in his blood, and at the point of death, from a large wound in the region of the heart, inflicted with a knife. At the *post mortem* examination, on sawing open the skull, Mr. Larrey was surprised to find a layer of lymph and purulent matter between the dura mater and the pia mater, which covered the entire circumference of the brain, and involved also the arachnoid membrane. On the cortical substance of the brain, especially towards the anterior lobes, and at the superior edges of the hemispheres, many points of suppuration were observed. The sinuses of the dura mater, as well as all the vessels of the head, were gorged with black blood; the ventricles contained a rather large quantity of serum; the base of the cerebrum and cerebellum alone remained sound."* Bucknill and Tuke think now, they may, with Larrey, draw from these facts "the conclusion that a deep moral sentiment, the desire to revisit his native country, was the cause which gradually developed the cerebral disorder preceding the act of suicide in this Swiss." But on an attempt to back this interpretation of the *post mortem* condition by an anatomo-physiological analysis we are left, and must pronounce the inference of the experienced alienists as morphologically an impossibility. Following up the physiological chronicity of nerve impression, we are led, to begin with, to the negative impression of vision, which caused in the man the consciousness of his alienation from home, and the settling on his mind of nostalgia; we are compelled to see in a constant reiteration of these nerve-impressions, as the main channel of any pertinent conception, the etiological root, being, however, of a negative character. His hearing could not have much to do with it, for, being in a Swiss regiment, he was not deprived of the

> "Sweet sound of the mother tongue in country far remote."†

Now, then, even if we were to admit a direct mental influence by the cortical fibres on the concomitant blood-vessels, although it would be as difficult to demonstrate it physiologically, as it would be psychologically difficult to give a reason why such an influence must be called mental, or even, as B. and T. have "moral," it could not be denied a concomitant influence on the heart, the very circumstance that it was the sense of vision by which the afferent nerve impression was conveyed, making this deduction unavoidable, because in closest proximity to the centres of visual sensation is the origin of the vagus-nerve, which would occasion a concurrence of bodily causes, even if aside or independently of them Bucknill and Tuke's moral cause would act. The learned alienists overlook, that any moral or mental cause is substantially never different from a bodily one, but the absolutely self-same object seen from other quarters. Therefore, even admitting that the said authors are perfectly justified, in the case mentioned, to speak of a moral cause, for such there was after all probability, it is for that not the less true, that an analysis of such an influence, which as a detail can not help being a bodily one, leads to the intermediancy which bears out the theory of Jacobi, the very mind not acting on the cerebro-spinal cavity but by the way of the ventral cavity and a disorder of its organs. "The whole of the circulatory system is regulated by the central nervous system through nerves."* Thus, how can in a case of mental disease be excluded this ubiquity of nervous work? Not otherwise, but by exclusion of all sensory impression, and then even the hypothesis of a moral cause being at the bottom of a cranial accumulation of pus would fail in stating the working order of this pretended deleterious influence; physiologically it would fail, because there is no morphological basis for a connection of agencies between the cortical centres of sensation and the alimentary blood-vessels of the pia mater directly.

Calling a spade a spade, the pathological condition in the Swiss soldier was a clogging of the blood-vessels, the proximate cause of which probably was in retarded cardiac action, but rested, probably, as its remoter cause, on a general want of equilibrium in histolysis and histogenesis, and the appropriate therapeutic measure in the condition, if sufficiently early detected to be amenable to treatment, would have been a dietetic diversion, easing up the efferent blood-vessels by a reduction of the afferent repletion. And analagously most cases of insanity will have to be met with, unless the morbid nervous and cerebral condition was caused by insufficient nourishment, when, however, a solid building up of tissue by vegetarian diet is as much in place.

There is an aversion against the very idea of quitting eating meat, because of the deprivation imagined to be involved in the measure. But such deprivation is a very unnecessary fear. Nature is more accommodating than man believes her to be. Meat-diet, and still more the concomitant condiments, dull the gustatory nerve. A palate, which is all day long excited by not only meat-juice, but pepper, pimento, theïn, nicotin and alcohol, must call rice insipid, and will consider a dish of spinach with potatoes and eggs a poor dinner. But a palate, which is never stimulated, but restored to its natural susceptibility, enjoys a piece of brown bread and a cup of milk as hugely as any *gourmet* his *paté de foie gras*

* L. c., pp. 224, 225.

† Goethe, Iphygenie.

* "Wesley Mills," Animal Physiology, p. 388.

and *sillery*. And then there is the comfort of an easy digestion into the bargain. The carnivore begins his dinner with a cordial to get an appetite, and finishes it with the dinner-pill to snatch an exceptional digestion from general dyspepsia. The herbivore, not excited by over-stimulation of the palate to over-repletion, manages easily to always have appetite to spare, and to enjoy his very digestion after meals.

In frequent cases an attempt to quit the habit of living on meat is given up as quick almost as undertaken, because of improper abruptness. The habit should never be given up at once, but gradually, half a year not being too long to break the body to the new custom, unless the taste for it be spontaneously developed quicker. Again, very often a trial period of vegetarianism was with a sneer definitely considered as proving in favor of the old kitchen, because the preparation of the dishes was far from being *secundum artem*. Meat being given up, Graham bread has to take the place of white bread, or both at least be eaten together, and vegetables should be served with the water they were cooked in, because this contains the nourishing not only, but also the tasteful parts, tasteful at least to a palate which is not maltreated by tobacco-juice and gin. The carnivores are mighty partial of their bouillon. But cooking vegetables, they throw the natural broth away, and prepare a sauce of their own, something that tells on a torpid palate.

A particular requisite of the vegetarian diet, especially if used for the purpose of regeneration of tissue, is water, good fresh spring water. There is no single drug in the pharmacopœa which to a similar extent promotes both, histolysis and histogenesis, as water, pure good water, and it should be made a rule with the patient to drink of it freely. The human body requires, to remain healthy, a great deal more water than it is being given, and it is by no means difficult to get up the habit of frequent drinks, which, once established, is a source of physiological enjoyment, and a paradise, compared with the hell of liquor and its intoxicating abomination. In many cases pedantry has scared from vegetarian diet. Pressing the literal sense of its name, which is not a very fortunate one, milk and eggs, even, were excluded, which is a useless extravagance. Vegetarian diet is a hygienic, not a philological subject. If its name does not bear strict interpretation, then pick out a more appropriate one, but don't make yourselves dietetically the slaves of a point of grammar.

As long as experience with vegetarian diet is not made on a larger scale, statistics does not extend to it. But there are some items of practical psychiatry which seem to speak in favor of our theory. "Esquirol observes that, of all diseases, insanity is the most hereditary."* Other observers confirm this fact. How now, could any less deep-going treatment promise to be a cure than a total regeneration of tissue, and how could this be produced except by a complete change of diet?

Again, among the physical causes of insanity the most disastrous one is intemperance. Now, then, to counteract this, the habit itself as well as its consequences, there is nothing more effective than vegetarian diet. An observer of so remote a time as Solomon states already the close connection between meat-diet and alcoholic excesses. And there is no observer but knows, that nothing gives so keen a relish for wine than viands. Flummery, herbs, fruit, take away the taste for alcohol, as also that for tobacco, which in its turn, is a temptation to use liquor; it is one stimulus following the other, either one of them, for cause of the reaction, failing to satisfy the craving.

On the other hand, among the psychical causes, the scale of the statistics is graded according to the more or less close connection with the ventral cavity. The scale is the following:

Domestic troubles and grief.
Religious anxiety and excitement.
Disappointed affections.
Fear and fright.
Intense study.
Political and other excitement.
Wounded feelings.

From this list an inference must be drawn, which is very favorable to our whole exposition. It follows from the scale, that the psychical cause of madness is the more detrimentous, the less intellectual complication is prominent. Domestic troubles and grief head the list, because they refer to an upset of the ganglionic habits of life. Religious anxiety and excitement come next, because it is in the nature of affairs of bigotry that the intellect is in abeyance. Disappointed affections go deep, because love matters are not governed by reason. Fear and fright work deep in as much as they overrun the judgment. Intense study is near to the bottom figures, because it is never a cause of insanity except when done in an injudicous way. Political excitement and wounded feelings stand lowest on the list, because it is owing only to intellectual extravagance if they cause insanity.

It is an absurdity, to attempt an objective line of demarcation between the physical and the psychical causes of insanity. "No two writers are agreed in what they include under moral and physical respectively."* And this because of the substantial identity of matter, of which bodies are the form, and mind the intimacy of its essentiality. But for reason of the analytic way in which we let abstraction serve the purpose of gaining lucid images of the world, it is useful to make the division. For, be it ever so true, that matter is

* Bucknill and Tuke, Manual, p. 58.

* Bucknill and Tuke, l. c., p.

both, mind and body, because these have in the former their point of identity, it shows not ever in like proportion. Esquirol makes the statement: "Insanity may be divided into imbecility for childhood, mania and monomania for youth, melancholy for mature age, and dementia for advanced life," and this was confirmed by statistics of Dr. Boyd.* And this peculiar relation of the forms of insanity to the state of the age can not be explained, except by our theory, that IN INSANITY THE INTELLECT IS THE LESS INVOLVED THE MORE THERE IS OF IT IN PROPORTION TO THE GANGLIONIC MISCHIEF. In infancy and old age the alienation of the mind tells most in intellectual regard, because in childhood the intellect is not yet developed, and in old age it is on the wane. In youth stormy outbreaks prevail, because the intellect is just developing and not yet proof to assaults of passion, while in manhood the symptoms point most unequivocally to their real source in the sympathetic system, because the intellect, being in its full strength, is least easily overrun. Meddlesome medical management, as a matter of course, may modify the measure. Pinel "relates the case of a man in whom dementia had been induced by over-depletion, and all the functions of the understanding obliterated." †

It can not enter into the scope of our subject to go into details of treatment. Our object was, to point out the connecting link between practice and psychological science. But we shall be allowed, to refer, as a test of the correctness of our views, to the statement in the editorial of the May number of the N. Y. MEDICAL TIMES, that in the Middletown Asylum the splendid therapeutic results obtained, as far as diet is concerned, are due to regeneration of tissue. The experienced medical chief of the institute says: "fatten up your patients! Well, now, what does that mean dietetically? Lean meat? *Quod non!* It does not mean nitrogen, but hydrocarbon, vegetables, fruit, flour, sugar, *enfin*, vegetarian diet, which, moreover, in judicious application, in its legumes, and grain not deprived of its gluten, has all the nitrogenous substances man stands in need of."

ON DIABETES MELLITUS.‡

BY C. E. LANING, M. D., CHICAGO, ILL.

PODOPHYLLUM is useful in those cases of diabetes in which the liver is decidedly deranged as a result of congestion of the same. There is almost always a great deal of mental depression, the patient is morose and irritable and fears that he is not going to get well. He complains much of his head, it feels dull and heavy, with occasional sharp, shooting pains about the temples and the base of the brain. The tongue, almost universally dry in diabetes, is often quite moist in the podophyllum patient, although usually quite dry and foul-tasting in the morning.

The evident hepatic symptoms present in a diabetic case calling for this remedy, often mask and cause to be overlooked the saccharine urine, and the case is treated simply as one of liver disease; the important complication just mentioned not being recognized. The moist tongue in particular is a symptom which is quite liable to mislead.

Under bryonia, the dry tongue with the exceedingly bitter taste is very characteristic. Podophyllum produces an equally bitter taste, but, as I have stated, the tongue and mouth are, as a rule, only dry in the morning for a short time after waking, the saliva soon being secreted in excess and the tongue appears broad, flabby and marked on its edges by the teeth.

Thirst is often present in a marked degree in spite of the fact that the mouth is so moist. The appetite is variable, at times being voracious and almost insatiable, again, a very small quantity satisfies and causes a feeling of fullness and satiety. This is a symptom found more or less under all the drugs which cause hepatic congestion with consequent stasis of the portal venous radicles. Thus you will remember a similar condition under leptandria, and it is also present under lycopodium, sepia, bryonia, chionanthus, etc., and is largely due to the simple mechanical pressure exerted upon the gastric filaments of the vagus.

The podophyllum patient is quite liable to have alternate attacks of diarrhœa and constipation, and the appetite varies with the state of the bowels, there being present a headache and poor appetite during the constipation, a lack of headache and the depression of spirits, with a good appetite when the bowels are loose. The urine varies very much as to quantity and appearance, at times being quite profuse and light-colored, compelling the patient to get up a number of times during the night to void it. Again it will be scanty and high-colored with a considerable sediment of the urates. Generally there is more or less tenderness over the hepatic region, and percussion shows the presence of hyperæmic hypertrophy. The stools, in contradistinction to those of leptandria, are generally light-colored, a light-yellowish as a rule, frequently of an offensive odor.

The feet and lower limbs are often more or less bloated in spite of the fact that the kidneys are acting freely, though usually this condition is most marked when the kidneys are passing through one of their inactive spells. The swelling of the feet and limbs can not properly be called dropsical, as it is seldom or never that any effusion occurs. It is rather due to venous stasis.

* Bucknill and Tuke, l. c., p. 117. † Id. ibid., p. 192.
‡ *The Clinique.*

The surface of the feet and limbs at such times are often quite cool to the touch.

The symptoms of gastric catarrh are usually present in a case calling for podophyllum and for this reason as well as the others which I have already mentioned the diabetic complication is often unheeded.

Aurum metallicum is a remedy which is generally overlooked in the treatment of diabetes and various hepatic diseases. It has a profound action upon the liver and the nervous system which in itself should suggest it *a priori* for diabetes.

When this remedy is indicated there wil be present the following symptoms: There is a frequent desire to urinate, the urine being passed in large quantities. On account of the portal stasis present under this medicine, there is liable to be present an intestinal and vesical catarrh, the latter of which often misleads the physician regarding the nature of the case with which he has to deal. Diabetic urine is of course, as a rule, light colored, and urine highly colored or turbid does not suggest the presence of sugar. The catarrhal condition referred to, however, often causes the urine to assume a turbid or milky appearance due to the presence in it of vesical mucus or the urate of soda, which is present in excess as a result of the impaired intestinal digestion caused in turn by the intestinal catarrh, an outgrowth of the portal stasis.

I am satisfied that if we as physicians were more generally familiar with the significance of symptoms, and were trained to trace out and understand the relation and the interdependence of one symptom or group of symptoms one to the other, much valuable clinical knowledge would be gained. No doubt cases of diabetes and of Bright's disease, to say nothing of a host of other maladies, have been overlooked or badly treated for the reason that some one or more symptoms of an unusual nature, have made their appearance, the significance of which has not been understood.

Under aurum, the urine is for the reasons given inclined to be changeable, often being cloudy, turbid, and at times offensive, having an ammoniacal odor; again, it is clear and odorless, and this, too, in a given case of diabetes. The appetite is usually voracious, though at times there is an absence of it, or at least a sudden satiety after eating. There is a bad, slimy, bitter taste in the mouth, the tongue being generally moist, though at times quite dry. Immoderate thirst is present always, irrespective of the amount of saliva secreted.

The liver is often swollen and tender to pressure and percussion reveals hyperæmic hypertrophy. The peritoneal covering is occasionally involved to such an extent as to cause sharp stitching pains, particularly on moving when lying down, as on turning over in bed. The nose is frequently swollen and red and tender, an almost unfailing sign of hepatic derangement.

As might be inferred from what has been said, there is more or less flatus, which usually has an offensive odor. The stools change in character and frequency from time to time, as is almost always the case in diabetes. When the bowels are constipated the stools are hard, dry, large and knotty, of a light gray or ash color. A diarrhœic state supervenes at intervals, at which time the passages assume a darker color and are irritating and burning.

The patient craves sour things and dislikes meats; two symptoms which are often present together, though the dislike for meat is a rare symptom comparatively, in diabetes. The hands and feet are often icy cold, which you will recognize as a characteristic hepatic symptom. Palpitation of the heart from slight physical exertion or from mental worry, is a quite prominent and frequent symptom. The exceeding depression of spirits so characteristic of aurum, is notably present in those cases of diabetes in which this remedy is indicated.

The mental state of diabetics will be observed to vary quite decidedly. While perhaps it would be too sharp a classification to divide them into two groups, it will not be far out of the way to say that they are either exceedingly cheerful and hopeful or unusually depressed and hopeless. This in itself is often a key to the nature of, or rather to the location of the lesion upon which the presence of sugar in the urine depends. The cheerful patient is one in whom the lesion is what may be termed purely nervous in character. The despondent patient is one who has a decided derangement of the liver. That is, in both cases the lesion is strictly speaking nervous, but in one the nerve centers involved are those which only or chiefly affect the hepatic cells that have to do with its glycogenic function; while on the other hand those centers are deranged which affect primarily the cells concerned in the formation of bile, the disintegration of albuminous matters, etc.

Mercurius solubulis has cured diabetes. Every one knows that this is a hepatic remedy, but few think of it as a remedy in nervous disorders; nevertheless it is at times exceedingly useful in this class of diseases. As I have stated, a medicine having what we might term a dual action of the kind just referred to, is almost always valuable in the treatment of diabetes. The indications for this remedy are so well known that it does not seem necessary to enumerate them at this time. I speak of it for the reason that it is usually neglected in the treatment of this difficulty, and also because as I have before said, the kind of symptoms that call for remedies of this class often mask those of diabetes, so that the physician

fails to test for sugar and furthermore neglects to prescribe the diet which he otherwise would.

Mercurius solubulis is not often indicated in a case of saccharine diabetes, nevertheless it may be of great use in certain states and stages. It will often assist in relieving many of the gastric symptoms with which the diabetic is troubled, and render less marked the almost inevitable constipation. It is generally most useful in the earlier stages of the disease, and no doubt has prevented more than one case of threatened diabetes from being fully developed.

An early symptom of diabetes, at least occasionally, is a tendency to coldness and clamminess of the thighs, accompanied with increased urination. Although the rule is for the skin to become dry when the disease is fully developed, still I have seen a few cases in which the clammy condition of the thighs referred to persisted, and in such instances mercurius has invariably been of decided benefit, relieving not only the symptom just mentioned, but also improving the general condition. The urine would become less profuse and frequent, especially at night, the bowels more regular and the passages more natural in character, the thirst less and the general debility markedly diminished.

Personally, I have never cured a case of saccharine diabetes with mercurius, but I have seen improvement take place to the extent just mentioned, making it possible for other remedies to complete the cure. Among the symptoms present in a mercurius case, the most characteristic, and one that has never failed me, is the clammy condition of the thighs with dryness of the rest of the skin. Other mercury symptoms will usually be present, but they are so well known that it is needless to mention them. Always, I may say, for the exception is so rare, there is much debility complained of by the patient suffering with diabetes and who requires mercurius. The least exertion exhausts him completely. He seemingly recuperates rapidly, since upon resting a few minutes he thinks that he has regained his strength, and feels rested, but the slightest effort at once completely overcomes him. This at times is not true, *id est*, the patient feels weak, listless and indifferent all the time.

Nitric acid and mercurius are always associated in my mind, not that their action is similar, but rather for the reason that the former is so often called upon to undo the bad effects of the latter. In diabetes they both are of benefit, principally in the earlier stages. As has been stated when lecturing upon the symptoms of the disease, small boils appearing in successive crops is often a forerunner of the appearance of sugar in the urine. Often in connection with these boils the urine is dark, scanty and alkaline in reaction. The skin is dry and scurfy, and the patient complains much of debility, especially after the least exertion.

As characteristic as "aversion to fat" is under pulsatilla, so is "longing for fat" under nitric acid. I have told you that in the first stage of diabetes the patient often develops a strange desire for meat, and when *fat* meat is craved this acid will be found to be indicated in a large number of cases. Nux vomica also has the craving for fats, though in a less degree than nitric acid. Strychnine is to be thought of in diabetes, and sometimes assists materially in lessening the debility and improving the general nutrition, and in toning up the vascular system, and hence diminishing the flow of the urine.

There are other remedies which belong under this group, but a lack of time forbids our entering into detail regarding them. They are less frequently indicated than those I have already mentioned, yet nevertheless are of great value at times. I shall merely mention a few of them; they are nitric acid, conium, creasote, lycopodium and sepia.

Among the many remedies that are useful in the treatment of this disease I must not fail to mention the *uranium nitrate*. There is no one remedy that I have ever used which has so universally given good results as this one. Seldom or never has it failed to lessen both the quantity of sugar and of the urine. In almost all cases it is well to administer this intercurrently. If it be not sufficient alone to cure it will at least lessen the drainage upon the patient's system while the *cause* is being removed. I have seldom found it necessary to give it in any other form than the third trituration, five grains three or four times per diem, although occasionally I have prescribed the first decimal to be taken in the same way.

Graphites I can not pass without a word. It is one of the remedies that are especially useful in combating the prodromal symptoms of the disease. If you find that the following symptoms are present, look out for saccharine urine and for graphites, for the one is liable to appear and the other to be needed:

The patient is morose and despondent; there is marked prostration; the urine is profuse and clear, especially is this true at night, the patient being obliged to get up frequently to urinate; the bowels are constipated, the stools being dark-colored, dry and knotty; particularly characteristic is an itching eruption in the bends of the elbows and in the popliteal spaces, and if to this is added frequent attacks of vertigo, it makes the indications so much the stronger.

The eruption spoken of at times seems to bear the same prodromal relation to saccharine diabetes that the small boils spoken of do. If in addition to the symptoms given there are hangnails accompanied by brittleness of the fingernails, you surely have a graphites case. Other

symptoms there are in connection with the appetite, thirst, etc., which at once suggest graphites as the remedy and point to diabetes as the disease.

There are two important points in the treatment of diabetes, or of any other disease for that matter, viz: to recognize the disease in its incipiency and to be familiar with the remedies and their indications, which are the most suitable for the purpose of combating the first stages.

Without stopping to give their special indications, I will merely name a few other remedies which belong in the same category. Hyoscyamus, ignatia, natrum muriaticum, ferrum phosphoricum, phosphorus, phosphoric acid, creasotum and silicea.

Of these the phosphoric acid is valuable in all stages from first to last. It will usually be found, in taking the history of a case of saccharine diabetes, that when phosphoric acid is indicated, there has been a long period during which the patient has suffered from what could only be termed chronic polyuria.

American Medical Colleges.—Fifty-five colleges of the United States were represented in the college meeting in Nashville May 21, 1890. Two interesting sessions were held and the preliminary work preparatory to a permanent organization was completed.

The following rules governing the admission of colleges to membership in the American Medical College Association were adopted:

First—That the colleges shall require a graded course of instruction, covering a period of not less than three courses of lectures of six months' duration each, before graduation.

Second—That both oral and written examinations be required of all students.

Third—That a thorough course of laboratory instruction be maintained in chemistry, histology and pathology.

Fourth—A preliminary entrance examination consisting of:

First—A composition, written in English, of not less than five hundred words.

Second—The translation of easy Latin prose.

It is provided, however, that students be allowed one year to make up any deficiency in this examination.

Third—An examination in higher arithmetic.

Fourth—An examination in elementary physics.

It is provided, however, that candidates who are graduates or matriculates of recognized colleges of literature, science and arts, or graduates of normal schools supported by the different States, be exempt from the provisions of this examination.

By resolution it was determined that the colleges entitled to representation in this convention shall enforce the above curriculum at the commencing of the session of 1892-93.

Female Physicians in Russia (*Novoye Vremya*, St. Petersburg, June).—The medical college in St. Petersburg admitted female students in 1873. Fourteen years after, at the instigation of the male physicians, women were denied the privilege of pursuing medical studies. During the period—1873 to 1887—the Medical Department registered 698 female physicians, but the number has largely decreased since that time. It seems to us that Russia, with a population of nearly 70,000,000 women and children, needs a large force of female physicians. But since 1878 they have received only compliments for a work more beneficent than that of their male colleagues. In 1881 St. Petersburg was ravaged by diphtheria. The city authorities made appropriations for the treatment of the poor, among whom the disease prevailed to a large extent. The female physicians were the first to offer their services, and they remained at their posts, although the male physicians resigned because of the inadequateness of the pay. Because of the signal success of the female physicians in the treatment of diphtheria and scarlet fever, the authorities have retained them, while all the male physicians have resigned or have been discharged. Their devotion and efficiency have been somewhat rewarded. The municipal government has reopened the medical schools for female students, and funds to the amount of 200,000 roubles have been subscribed for their maintenance. Their intelligence, devotion and efficiency should be acknowledged by placing them on an equal footing with the male physicians throughout the empire.

Wind Instruments From a Medical Point of View.—G. T. Hankins, *Aust. M. Gaz.*, Jan. 1. I consider the instrument *par excellence* for the young amateur to be the flute. Its practice is not only free from danger, but may be indulged in with positive benefit to the health. The pressure is very slight, the position of the body is good, and the respiration free; I have frequently played for three hours at a stretch without any inconvenience, if I except a crick in the neck from holding the head so long in one position. During flute-playing the renewal of the air in the lungs is frequent, and the inspiratory action without being excessive is sufficient to bring into play the apices of the lungs, those portions which on account of their usual inactivity and consequent low vitality, are the seat of election for tubercle. Flute-playing is a capital substitute for walking exercise, when from disease this is impossible, and I can answer for its promoting appetite and raising the spirits in a way that it would be difficult to find excelled by any other sedentary amusement. On account of the necessarily rythmical character of the respirations wind-instrument practice ought to equal elocution and singing as a cure for stammering. Practice should always be discontinued on the occurrence of the slightest catarrh, and the peculiarity of the tone produced will often be the first indication that cold is coming on, the tone in the early stages being often improved. The *oboe*, though not requiring so much pressure as the clarionet, necessitates the chest being kept full for a longer period than is physiologically desirable, the result being want of æration of the blood, and the risk of the elasticity of the air vesicles being impaired in consequence of the mechanical anemia caused by prolonged pressure on their capillary net-work. The *cornet* I regard as a very trying instrument, unless the player is content with moderate effects, and does not strive at very high notes or *forte* passages. In conclusion, I will give you the opinion of one or two authorities on the effect of wind-instrument playing generally: Alphonse Jaxe, Jun., Paris, the inventor of the saxhorn, saxophone, and other military instruments, says that three only of the many thousand workmen employed from time to time in testing their instruments have died of consumption, and these unfortunate men were addicted to excesses of all kinds. That he was one of a family of eleven, all of whom, with the exception of three, died of consumption, and these were early in life taught to play wind instruments. That he was never ill but once in his life when he had to give up the flute on account of some trifling injury, and he only began to make a rapid recovery when he was allowed to resume his instrument. Dr. Burg says that his mother and both of eight of her children died of consumption, three surviving, who played wind instruments from an early age. Dr. Scot-Skirving informs us that in the highlands it is an old woman's yarn

that those who play the bagpipes never get consumption. Dr. Jenkins gives an instance of a contracted chest being expanded and developed by practice on the Highland bagpipes. I venture to express a hope that the playing of wind instruments, with proper precautions, may take a prominent part in the preventive treatment of pulmonary disease.

The Forceps—A Death Trap.—A correspondent of the *British M. Jour.* writes as follows: Last week I attended a healthy young Primipara, assisting her when exhaustion was setting in with the forceps. My hands had been soaked in sublimate solution, and the forceps smeared with carbolized glycerine. The uterus contracted firmly, and there was no oozing after delivery. In two days fever, ending fatally, set in. I could not imagine how this patient became infected till I took the wooden handles off my forceps. Beneath the wood was a good coating of blood—dry, black and dirty; there was plenty of the same stuff round the screws and in the screw holes; this, I think, explained the septicæmia. The traction expresses this poisonous stuff, liquified by soakage, and from the hands of the doctor, notwithstanding the early sublimate soakage, the patient is poisoned. We have got to the time of day when the handles should be metallic, and of one piece with the blades I put my handles in the fire, and when I put the blades in position for the future will put a towel round the flats to protect my hands. I am, etc.

Wood as a Source of Human Food.—In an address delivered at Heidelberg, by Victor Meyer, it is announced that we may reasonably hope that chemistry will teach us to make the fiber of wood a source of human food. The fiber of wood consists essentially of cellulin $C_6H_{10}O$. Starch has exactly the same percentage composition. Cellulin is of little or no dietetic value, and it is not altered, like starch, in boiling water. It readily gives glucose when treated with strong sulphuric acid, as is easily shown when cotton-wool, which is practically pure cellulin, is merely immersed in it. Starch gives the same product when boiled with weak acid. The researches of Hellreigel go to show beyond dispute that certain plants transform atmospheric nitrogen into albumen, and that this process can be improved by suitable treatment. The production, therefore, of starch from cellulin, together with the enforced increase of albumen in plants, would signify the abolition of the bread question.

A Paste that Will Adhere to Anything.—Prof. Alex. Winchell is credited with the invention of a cement that will stick to anything (*Nat. Drug.*). Take 2 ounces of clear gum arabic, 1½ ounces of fine starch, and ½ ounce of white sugar. Pulverize the gum arabic, and dissolve it in as much water as the laundress would use for the quantity of starch indicated. Dissolve the starch and sugar in the gum solution. Then cook the mixture in a vessel suspended in boiling water until the starch becomes clear. The cement should be as thick as tar, and kept so. It can be kept from spoiling by dropping in a lump of gum camphor, or a little oil of cloves or sassafras. This cement is very strong indeed, and will stick perfectly to glazed surfaces, and is good to repair broken rocks, minerals or fossils. The adtion of a small amount of sulphate of aluminum will increase the effectiveness of the paste, besides helping to prevent decomposition.

Diagnostic Signs of Melancholia.—Dr. Landon Carter Gray, in an article read before the American Neurological Association, June 28, 1889, gives three constant symptoms of melancholia. These are the melancholy, marked insomnia and a post-cervical ache.

The melancholy is different from simple sadness. There is seldom an adequate cause for the depression which the patient will often not recognize the presence of, and about the treatment of which he or she is often utterly indifferent, if indeed he or she be not obstinately opposed to any treatment. A certain dullness of mental reflex, shown by slower responsive acts or words than are usual in a healthy mind.

The insomnia is usually one of the earliest symptoms of the disease, but has no special characteristics.

The post-cervical ache is an aching pain in the back of the neck, head, and sometimes into the shoulders. It is usually described as a distress or ache, although it may occasionally be neuralgic in its character, and not unfrequently passes into neuralgic paroxysms which will last for a day or two. In true melancholia the suicidal and homicido-suicidal tendencies are so organic a part of the disease that the mildest case is not to be trusted, and valuable lives may be saved by some method of prompt recognition.

The Brown-Sequard Elixir Again.—Carswell Sconce in the *Medical World* says he has felt the need of something to tone up the life principle in him, being seventy-one years old. He believes in the elixir, but thinks it too difficult to get and use it properly. So he investigated the subject. As a result he used the following: Procure a sound fresh egg and break it in a saucer. Then with the aid of a small pair of forceps separate the cytoblast (semen) from the ovum, One egg will be sufficient for one application. Use the hypodermic syringe or apply the mass to a blistered surface, and in five minutes you will feel the characteristic thrill and warmth, with increased action of the heart.

A Food for Infants.—In the summer diarrhœal troubles of infants, where milk in any form disagrees and vomiting is easily provoked, Jacobi says that a mixture which is about as follows has rendered him valuable service: Five ounces of barley-water, the white of one egg, from one to two teaspoonfuls of brandy or whiskey, some salt and sugar; a teaspoonful every five, ten or fifteen minutes, according to circumstances. Mutton broth may be added to the above mixture, or may be given by itself, with the white of an egg and some salt.

Operative Treatment of Strumous Glands.—Mr. Bertram Thornton read a paper on this subject before the West London Medico-Chirurgical Society (*Med. Press and Circ.*). He alluded to the records of the last fifty years at the Royal Sea Bathing Infirmary, Margate, which testified to the unsatisfactory and tedious methods of treatment prevailing up to within the last few years. Having reviewed the various modes of treatment of enlarged glands in their different stages, such as erasion, by poultice, iodine painting, mercurial ointment, calcium sulphide, etc., injection of various drugs and application of strong caustics, he pointed out that whatever action these methods had on the diseased glands, the process was very tedious and uncertain, and the resulting scars most unsightly. An operative experience of about a hundred cases of various degrees of magnitude led him to urge the excision of every enlarged gland or part of a gland after a reasonable period—say six or eight months—of constitutional treatment and change of air at the seaside. Modified operations, such as scooping, aspiration, small punctures with drainage, were nearly always unsatisfactory, as diseased gland tissue was left behind. Hitherto, he had fortunately had no death or serious complication to record, and the vast majority of cases had healed rapidly. He claimed for the method of excision that many months of tedious treatment were saved, the resulting scars were less unsightly, and that the operation if performed with skill and care and in good hygienic surroundings was usually satisfactory.

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"PHILOSOPHY IN HOMŒOPATHY."

EVER since the lapse of Greek philosophy and the rise of theistic fanaticism the average man has shown a desire to indulge his powers on the fictitious or abstract, under the guise of philosophy. Every department of learning has suffered from this cause, and, with the exception of theology, none so much so as medicine. Happily for the progress of this art, Old School medicine has been safely delivered of it. Not so, however, with the New School. Ever and anon, comes a new delver into teleology—a new seeker after nothingness in the domain of the unknowable, with the effect to stultify the common sense and make a mystery of that in which only a mystic can find a mystery.

We have been led to make these observations by reading Prof. Mack's little volume, entitled, "Philosophy in Homœopathy." It is a neatly printed, loosely written little book, intended to instruct medical students and to edify the non-medical public; and but for the fact that its author is a professor in the University of Michigan, we should not give it more than a passing thought.

To the ordinary observer of mundane things, sickness and relief from sickness are commonplace facts. To him the causes of sickness are, for the most part, sufficiently obvious; so, likewise, are the methods of relief from disease or sickness. This is not the case, however, with Prof. Mack. He sees in *disease*—or thinks he does—a dynamic mystery of portentious proportions, and in *cure*, an occult process which can only be explained by the aid of *similia similibus curantur*. *Disease* is the opposite of health, he says; an abnormal disturbance of the vital processes; and *cure*, a "modification of the *quality* of vital processes and their effects;" so that, as a direct action of a medicament, these abnormal processes and effects "shall become normal" (p. 33). "A drug can be curative," he declares, "only by reason of its dynamic effect upon the *patient*. Curative treatment is invariably a treatment of the *patient*, and never a direct attack upon the proximate cause of disease" (*ibid.*). Castor oil, then, is not curative in alvine concretions, and dysentery; nor is the external use of sulphur curative in itch or scabies; antiseptic ointments, in eczema; quinine, in malaria; opium, in puerperal fever; or calomel, in specific enteritis, albeit, the patient frequently recovers from these complications through the effective agency of these remedies and appliances. The author admits that these empirical procedures in medical treatment are highly salutary and life-saving, but insists that they are not curative effects in a specific sense. They do not modify "the quality"—whatever that may be—"of the vital processes," which effect alone is curative, and can form no part, therefore, of the true science of therapeutics. To cure a disease directly, not indirectly by means of hygiene and prophylaxis, comprehends the application of the law of similars, which alone, he avers, can so "modify the quality of vital processes that they shall resist morbific influences" (p. 76). This proposition the author repeats all through his book. We wonder that its absurdity is not apparent to him.

Rightly to comprehend rational methods and measures of cure, it is necessary to understand the nature of the malady to be cured. It is not such a stupendous feat of intellectual gymnastics as the author would have one believe. No single method, be it observed, is applicable to all cases. Certain cases of neurotic or psychic origin may properly—the more properly—be treated and cured by the specific method, that is, by remedies which, in the curious language of Prof. Mack, "modify the quality of the vital forces," without regard to their causation; certain other cases, and by far the larger class of cases, require a method of procedure which comprehends finding the cause and removing it; certain other cases require purely antiseptic treatment. It is too late in the nineteenth century for a man—much less a professor in a medical college—to declare, as does Prof. Mack, that the nature of a disease, or its causes, are past finding out—inscrutable. Such a declaration is too Hahnemannian for anything. Not only is it possible for a physician of ordinary

intelligence, possessed of the ordinary aids to diagnosis, to ascertain the causes of disease, but it is possible, also, for such an one to know the true nature and significance of the abnormal action of the economy—the signs, symptoms and disabilities, which are recognized as disease. This is his first duty. It is a manifest error to suppose, as many do, as Prof. Mack teaches, at least, by implication, that disease is an entity, a *possession*, or a dynamic disturbance caused by an "evil sphere," to be scotched or sniffed out by another entity of similar morbific nature. The masters of medical thought have always taught, and do now teach, that disease is vital action in respect of ill-conditions; that the pain and suffering (symptoms) of a sick person are coincident to the process of convalescence, of throwing off extraneous and morbific matters that have been generated within, or been imbibed by the organism from without. Such action on the part of nature is highly conservative and beneficent, and, as a rule, not destructive. Without such action on the part of nature—which may properly be called remedial effort, the bodily powers would soon be subverted, surrounded as man is by countless morbific causes every moment of his life. Every one knows the truth of this philosophy of disease who has had an eruption, been through a course of fever, or suffered from an "attack" of any other disease; he is so much better for having had them. "Every one believes," said Prof. Virchow, "that disease preserves life." It is impossible, in this world of germinal dust and dirt, to keep well without "disease," paradoxical as the statement may seem. Nature is properly always renovating and repairing our bodies. And we protest against teaching a philosophy of disease and cure at variance with this fact, as misleading and mischievous. It is misleading and mischievous, also, and a damage to the cause of truth and homœopathy, to befog the teachings of science on matters of practical medicine with disquisitions on spiritual causes as distinct from physical. We have no conclusive proof of the existence of such causes. Nor have we any evidence of things immaterial, except as states and modes of matter. The microscope has removed the shadow of mysticism from many causes of so-called immaterial or dynamic and psychic origin. And we can not doubt, but that with redoubled vision much that is now thought to be of purely psychic origin will be found to be as palpably material as the myriad of spores which we inhale with every breath. Better is it for the cause of homœopathy and medical progress, that those who essay to teach philosophy should confine themselves to the limits of the knowable, and to making inductions from legitimate premises. Let us teach what we know, meanwhile keeping our faith serene and steadfast in the Unseen and Unknowable.

D. A. G.

THE STATE UNIVERSITY.

THE twenty-eighth annual convocation of the University of the State of New York began its three days' session in the Senate Chamber at Albany, July 10. The convocation is made up of leading educators from the prominent schools and colleges of the State, who discuss matters pertaining to the educational interests of the country. In the evening the new Chancellor, George William Curtis, gave his inaugural address in the Senate Chamber before a distinguished audience which filled every part of the room. The Chancellor gave a clear and concise idea of the history, character and duties of the University, showing the points of difference between it and the continental universities of Europe, and also those of Cambridge and Oxford.

The University as it now exists was organized by Act of Legislature of 1787, in which the State established a system of supervision for colleges, academies, and higher institutions of learning. There are, as part of the University, no local college halls and no chairs for instruction. The Regents are simply trustees and the Chancellor chairman. Additions have been made by the Legislature to the work and power of the Regents of the University, as the exigencies of the various departments of science and education required. In 1846 they were made trustees of the State Library, one of the richest and most important libraries in the State, and also of certain local law libraries. The next year they were made trustees of the State Museum of Natural History. They are authorized, at their discretion, to confer the highest honorary degrees, to appoint boards of medical examiners, and on their recommendation to confer the license to practice medicine. They hold examinations and grant certificates preliminary to the entrance upon legal and medical studies, and in all the academies they hold examinations which determine the standard of academic instruction. They are the custodians of the historical documents of the State, and conduct the publication and distribution of those scientific works issued by the State for the benefit of its people. It will be seen the University has more than a mere supervisory agency over the educational institutions of the State. By its watchful care and ceaseless vigilance, by its

annual convocation of the best educators of the State, the great problems of education are discussed and analyzed, and a stimulus is given to a constantly enlarging and progressive educational life which is felt, not only throughout our own State, but wherever the influence of its citizens may reach.

We were glad to hear the Chancellor urge, with great force, the idea which has been repeatedly urged in this journal, the establishment of degrees outside the regular college degrees, to be conferred by the regents after examination, in the various departments of literature, science and art, no matter where the knowledge was obtained. If the student, unable to attend a college course, but catching a few hours from his daily toil for study, can acquire sufficient knowledge as to enable him to pass an examination which shall thoroughly test his knowledge, it is wise and just that his abilities shall receive proper recognition. These degrees would be eagerly sought after, and do much to bring out that latent talent which in so many instances in this country has ripened into the accomplished and far-seeing statesman and the profound scientist and educator.

We believe the present director of the Lick Observatory in California studied the profession, of which he is now such a distinguished ornament, when a type-writer in a lawyer's office in Chicago, and was called directly from type-writing to his present position. The Chancellor's position is the democracy of true science and is thoroughly practical, that education and the ability to rightly utilize it, no matter how obtained, shall be the open door to every avenue of scientific labor. The question should be as to the actual possession of knowledge, not where it is obtained, and to all who could come up to the standard the University should extend a cordial welcome.

IMMORTALITY.

THE more careful study which scientists have recently given to the combination of atoms and the power of material bodies has naturally led to a closer investigation of vitality itself, and in the study of psychology we are approaching nearer and nearer the solution of the great problems of life and health. Prof. Le Conte, in the July *Andover Review*, presents in a very concise and clear manner a philosophical idea, at least, of the nature, origin and destiny of the human spirit. He says:

"There are three possible views of the nature, the origin and the destiny of the human spirit: (1) That it always existed, is uncreated, underived and eternal both in origin and destiny, and that as it never began so it will have no end. This is substantially the view of Plato, of Leibnitz, and, perhaps, some other philosophers. (2) That it is derived from God directly, created, but not by natural process; that at the moment of the creation of the first man, and at some unknown time in the development of each individual, and in some inscrutable way, it was injected ready made into the body, from the outside, and at the same time endowed with immortality. This, as nearly as I can describe it, is the orthodox view. (3) That it was indeed derived from God but not directly; created, indeed, but only by natural process of evolution. It preëxisted indeed, but only as embryo in the womb of nature, gradually developing, and finally coming to birth as a living soul in man. Thus it does not possess immortality of its own right from the beginning, nor is it endowed supernaturally and at once, but attains immortality by law, at a certain stage of its development.

"This latter is the view that commends itself to me. I assume that a Divine energy pervades all nature and constitutes what we call the forces of nature; and what we call the laws of nature are naught else than the modes of operation of this Divine energy. As scientific thinkers we must assume this, because an anthropomorphic deity operating on nature from the outside as on foreign material is incompatible with scientific thought. For science, either God is immanent in nature, operating at all times, and in all places, or else nature operates herself, and has no use for any God at all. On these assumptions it seems to me probable—nay, certain—that a portion of this all-pervasive Divine Energy, which we call the forces of nature individuated itself more and more, by a law of evolution, until it attained complete individuality in the spirit of man.

"According to this view the *anima* or soul of animals, although constituting a great evolutionary advance on the life principle of plants, is still only unborn spirit—spirit in embryo in the womb of nature, unconscious of self, incapable of life, separated from nature. In man, spirit came to birth, became capable of separate independent life, that is, of immortality. Nature is still nursing mother of spirit, but no longer gestatory mother. Self-consciousness, the turning in of thought upon itself, is the sign and seal of completed spirit-individuality, of the birth of spirit into a new and higher world.

"If we remove the skull or brain cap of a human being, there is nothing evident to the scientific observer from outside but molecular motions, physical and chemical, chemical decompositions and recompositions. The subject of the experiment knows nothing of the phenomena, but is aware of phenomena of a totally different order, consciousness, thought, desires, will, etc.

"Here then are two sorts of phenomena the one set observed by the outside observer with his physical senses, the other by the inside observer with his spiritual senses. Must we not then believe that nature has a psychical as well as a physical side? We standing on the outside see nothing but physical phenomena. But may we not rationally conclude that the psychical always underlies the physical, and that if we could look within we would find there also conscious personality?

"In the operations of our own brain we do get behind some physical phenomena, and find there a new world, a psychical, or spiritual world. Now if there is a God in the sense of self-conscious spirit behind the phenomena of Nature, is it not evident that, by getting behind some physical phenomena in our own self-consciousness, we become thereby, and in so far, partakers of the Divine nature? And an essential attribute of that Divine nature is Immortality."

"HOMŒOPATHIC COLLEGES."

AS DR. TERRY'S letter presents in clear and forcible language important truths, which may possibly be of interest to colleges outside of Cleveland, we gladly give it place in the TIMES and commend it to the careful attention of all whom it may concern:

Utica, N. Y., June 28, 1890.

Dr. R. B. Rush, Chairman of the Board of Censors of the Cleveland Homœopathic Hospital College.

My dear Doctor: You have asked me to make any suggestion which I may deem necessary calculated to raise the standard of the college of which we are alumni and censors.

I can recall the feeling of confidence which I possessed after graduation as to my ability to cope successfully with all of the diseases to which we are heir, and of my lamentable fall of pride after a brief trial of the so-called indicated remedies. I will not be personal by casting any reflection on any professor connected with the college now or in the past. It is enough to note that the same defect exists in reference to instruction in materia medica, therapeutics and in clinical medicine. I have sometimes thought that the professors felt themselves obliged to sustain a dogma in medicine, which has in practice been thoroughly proven to be inadequate to the wants of the profession in practical life. We are not homœopathists. We are supposed to be a body of medical men who believe in the specific action of drugs—a principle which Hahnemann's theory and practice sustained to a large degree. Unfortunately, however, we have surgical and septic diseases, chemical disturbances, mechanical annoyances and pathological conditions as well as functional disorders, and for these reasons the dependence on a single remedy, without reference to auxiliary measures, and, furthermore, a symptomatic knowledge of a drug without a clear understanding of its origin, chemical and pathological action and uses from other standpoints than ours is calculated to send students out into the world blindfolded and at the mercy of others better prepared to cope with the varying features of disease. Therefore, I would recommend the study of remedies as elaborated in the U. S. Dispensatory, as is done, I am informed, in the Boston University School of Medicine. Then in the treatment of the various conditions demanding medical attention, all of the best known measures should be given the student *regardless of school*, and, in fact, the same principle of giving the student the most recent information in the various branches of study should be carried out.

Lastly, if such reformation should be begun, the student would be saved the mortification of failure when there existed possibility of cure, and his reputation for scientific attainments in his profession secured. I am, my dear doctor,

Yours very truly,
M. O. TERRY.

ARMOUR & CO., of Chicago, whose canned meats are so well known throughout the world, have recently turned their attention to the preparation of an extract of beef. With their unrivaled facilities for selecting meats and the best chemical skill which can be procured, they have placed upon the market an extract of beef in both solid and fluid form which contains all the nutritive properties of beef and is entirely free from the objectionable burnt taste and smell. As the basis for soups and in the sick room this extract will be much sought after.

DR. H. HOLBROOK CURTIS, in the treatment of pneumonia, relies upon digitalis, strychnine and aconitine. In acute cases the aconitine is given in $\frac{1}{100}$ grain hourly or half hourly in combination with $\frac{1}{4}$ grain of digitalis and $\frac{1}{4}$ grain of arsenate of strychnine till the temperature falls to 100 when the aconitine is suspended, and when it falls to 90 the digitalis is suspended but the strychnine is continued at hourly intervals throughout the attack. Dr. Curtis says that the alkaloids are preferable to the tincture, on account of the ease with which they are taken, and that no careful observer who has used the drugs in combination and noted the action on the heart will ever be inclined to place much confidence in alcohol and ammonia in the treatment of this affection.

IN A practice covering many years we have never seen a case of rabies in dog or man, and yet if we believe the papers they are now so common that they are treated in institutes organized for the purpose by the hundred and thousand. If a dog in the heat of summer has a fit either from the effect of heat or indigestion and snaps at any one with whom it comes in contact he is instantly pronounced mad, the wound cauterized and the dog killed. If the dog were restrained for three or four days it would, if mad, die of the disease, and the fact of his real condition thus become fully established, while if killed the evidence is at once removed, causing that doubt and uncertainty, which would almost absolutely follow, to develop a nervous condition closely resembling the real disease and not unfrequently proving fatal. Keep the dog alive if possible for at least a week, and in nine cases out of ten the haunting fear of death by hydrophobia will be removed. The existence of hydrophobia is too well proved to admit of doubt. The benefit derived from the great discovery of Pasteur is an established scientific fact, but the bite of a dog it should always be remembered only communicates disease under certain conditions, and those conditions should be fully established during the life of the animal. Without the positive proof of rabies in the dog the person bitten may be harmless for months by a fear which is possibly groundless.

THE *World* newspaper, which is fruitful in good ideas for the benefit of the people in suggesting an open air garden over the 42d Street reservoir, has struck a note which will harmonize with the feelings of every enlightened citizen of our city. The only wonder is that an idea so easily worked out and at such slight expense and which promises such lasting good to the city has not been suggested before. The four acres of Bryant Park, on the west of the reservoir, terraced up to the top of the wall, and the four acres of the reservoir, covered with a floor of masonry or iron, from the centre of which, set in a garden of shrubs and flowers, would rise a vast music and recreation hall, with a lookout on the top from which the bay, the rivers and the entire city could be seen, would be a constant source of pleasure, health and instruction to our people, and far surpass in beauty and grandeur the famed gardens of the Alhambra or the hanging gardens of Babylon. Now the idea has been started we are confident there will be no delay in obtaining the necessary legislative endorsement, and that by 1892 the dream will be a reality.

THE House of Refuge for Women, organized by the State, in Hudson, is showing under its present management an efficiency and energy in developing and carrying into practical working the philanthropic idea upon which it was founded and which breathes through all its work, highly commendable. The idea is as old as Christ, to lift the fallen to turn the steps which have gone astray, and by a healthy influence and judicious instruction save a human being from degredation and ruin and the state from the cost of future trials and punishment. This is that religion which is the outgrowth of the belief in the fatherhood of God and the brotherhood of man the essence of true statesmanship and philanthropy.

The published statement in the *World* of the experience of one of its reporters in the workhouse on Blackwell's Island, shows very conclusively that a point might be taken from the Hudson institution with decided benefit.

OUR medical friends in New Jersey, in their eagerness to prevent outside physicians from poaching on their preserves, may possibly find they have overstepped the limit of constitutional law. The old law, which was a very just one, required every physician, before he could practice outside his own state, to register his name, with the evidences of his authority to practice medicine, in the office of the county clerk. The new law, which went into effect July 4th, subjects every physician outside the state, except surgeons in the army and navy, to an examination before constituted authorities before he can prescribe even for his own patients who are sojourning for a time at the farm-houses or watering-places of New Jersey. If medical advice is needed their family physician, living out of the state, unless he has complied with this law, can only see them in consultation. The practice of city physicians visiting watering-places to pick up what practice they can is certainly objectionable, but a law so stringent as that adopted by New Jersey is not needed to protect the local physicians. And we very much doubt if it would stand the test of the courts, or if it did it would certainly act to the injury to places of summer resort.

Nitro-Glycerine in Collapse.—Dr. M. H. Lackersteen, in the journal of the Sei-I-Kwai, a Japanese medical society, gives the case of a woman who sank from collapse a few days after giving birth to a child. Life appeared to be quite extinct, but a minute after the injection of ten drops of solution of nitro-glycerine the patient gave a slight gasp. Within four minutes the heart was distinctly heard, the muscles relaxed and she became conscious; in a few days she was well.

BIBLIOGRAPHICAL.

PRACTICAL AND ECONOMIC COOKING, ADAPTED TO PERSONS OF MODERATE MEANS. By Mrs. Mary Hinman Abel.

The offer of Mr. Henry Somb, of Rochester, of $500 for the best essay on the above subject, brought out the very admirable essay of Mrs. Abel, which has been published and widely circulated by the American Public Health Association. Of this essay the committee very justly say: "It is simple and lucid in statement, methodical in arrangement, and well adapted to the practical wants of the classes to which it is addressed. Whoever may read it can have confidence in the soundness of its teachings, and can not fail to be instructed in the art of cooking by its plain precepts, founded as they are upon the correct application of the scientific principles of chemistry and physiology to the proper preparation of food for man." The discussion of the five food principles, water, proteids, fats, carbohydrates, salts or mineral constituents, with the receipts for cooking, will be of great value to all those who wish to live well at a small expense.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sarjous, M. D. and Seventy Associate Editors, Assisted by over Two Hundred Corresponding Editors, Collaborators and Correspondents. Illustrated in Chromo-Lithographs, Engravings and Maps. In Five Volumes. F. A. Davis, Publisher, 1890.

In addition to the general improvements introduced in 1889, all of which have been retained, several new departments have been created for 1890 on subjects before considered under general heads. Syphilis, under the editorship of Prof. J. Wm. White, appears as a special section, and is replete with valuable information. Surgical mycosis and thoracic surgery each form a special department.

The department of oral surgery has been improved by the introduction of the minor surgery of the teeth. The sections of orthopedic surgery and bacteriology have been very much extended, and the section of therapeutics contains a résumé of the therapeutic application of hypnotism. The admirable reports in which the progress of the world of science and art in our profession is presented under these volumes must be acceptable to the profession.

A NEW MEDICAL DICTIONARY. Including all the Words and Phrases used in Medicine, with their proper Pronunciation and Definitions, based on Recent Medical Literature. By George M. Gould, B. A., M. D., Ophthalmic Surgeon to the Philadelphia Hospital, etc. With Tables of the Bacilli, Micrococci, Leucomaïnes, Ptomaïnes, etc., of the Arteries, Muscles, Nerves, Ganglia and Plexuses; Mineral Springs of U. S., Vital Statistics, etc. Small octavo, 520 pages. Half Dark Leather, $3.25; Half Morocco, Thumb Index, $4.25. Philadelphia: P. Blakiston & Co.

Concerning its aim and scope the author in his preface says that his purpose has been—

1. To include those *New Words and Phrases* created during the past ten years—a period rich in coinages—which appeared destined to continuous usage. There are certainly thousands of these, and in their compilation I have especially endeavored to cover the latest results in the study of bacteriology, ptomaïnes, leucomaïnes, electrotherapeutics, embryology, physiology, pathology, etc., and in the various special branches of medicine, such as ophthalmology, otology, laryngology, gynæcology, etc.

2. To frame all *definitions* by the direct aid of *New, Standard and Authoritative Text-books*, instead of making a patchwork of mechanical copying from older vocabularies.

3. While neglecting nothing of positive value, to *omit obsolete words* and those not pertinent to medicine except in a remote or factitious sense.

4. To make a volume that will answer the needs of the medical student and busy practitioner, not only by its *compactness of arrangement* and *conciseness of definitions*, but also by its *convenience of size* and *price*.

The author has succeeded admirably in his plan, and has given to the profession a work of marked excellence which all will appreciate.

CORRESPONDENCE.

DR. ECCLES' ARTICLE.

Dr. Eccles (who has an article in your May issue) gave a lecture to a public audience in Brooklyn some months ago on "The History of Medicine," but it was really a bitter and mendacious tirade against Homœopathic Physicians.

In his article in your journal he says, in one place, that diversity of opinions (or mobility of ideas) is favorable to progress in medicine as well as in other fields of mental activity. In another place he says that "the dominant body" of medical men have now only one rule and that is the absence of any rule whatever. Again he says, "Theories are useful things," but "when a man's mind is trammelled by a theory to such an extent that he will not welcome facts that controvert it, his intellectual growth has ended."

How does this apply to the "dominant" body whose only rule, we are now told by the "dominant" Dr. E., is "No rule" of any kind. Did they have any rule when they murdered people wholesale by phlebotomy, salivation, hyper-catharsis, &c.? Did they have any rule when they persecuted Mesmer and Hahnemann, and Liebrault, and the early Eclectics and Homœopaths of America? If diversity of opinions is a good thing, why does Dr. E. belie, and slander the medical heretics of the non-dominant schools, because they have theories and societies of their own. Does he think that misrepresentation and vituperation are, at least, as detrimental to progress and human happiness, as any "theories" can possibly be?

His references to methods of "Logic" are as incongruous as a sermon by Charles Guiteau on "Love Thine Enemies," would be.

I will not dwell further on the flagrant inconsistencies of this "regular" irregular, whose sign and shibboleth of "regularity" is "No rule," in medical practice.

I am not a "Homœopath," but I have derived much profit from the perusal of Hahnemahnn's works, and those of other physicians of his school. All intelligent and progressive physicians are really eclectics, whether they call themselves so or not.

I am one of those medical heretics who think that *all drugs* and *poisons* are quite useless in most cases of acute disease.

Yours, truly,

R. V. O'NEILL, M. D., PH. D.

OBITUARY.

CHARLES TAYLOR, M. D.

Dr. Charles Taylor died at his home in New Milford, Ct., on July 4th, 1890, in the sixty-second year of his age, after an illness of several months.

"For almost a century one could scarcely think of New Milford without thinking, also, of Doctor Taylor, so long and so prominently were, first the father and then the son, identified with the town itself, and all that concerned its inhabitants and its life. Nay, nearly two centuries ago the ancestor of the Taylors here, Rev. Nathaniel Taylor,

was called as the *second* minister in the town, and was himself a clergyman of note. He was the ancestor also of that most distinguished and eloquent divine, the Reverend Doctor Nathaniel W. Taylor, of Yale University. Doctor Charles Taylor, who died after a protracted and painful illness, was bred to his profession from early youth, and was educated at Yale University and at medical schools of New York and Philadelphia. After admission, he devoted himself to practice at New Milford in association with his distinguished father, Dr. George Taylor, so well and so widely known, both in professional and political life in this State. In that most happy relation, father and son, following the same profession, loving and honoring each other, both lived for many prosperous years in the same large New England mansion, and made their home the center of elegant hospitality and social life and enjoyment.

"Dr. Charles Taylor was honored with every office in the gift of his townsmen, which he could be induced to accept, and was sent to the Legislature repeatedly—as often indeed as he would consent to go, being at the time of his decease a prominent member of the present General Assembly, serving on important committees. He was, also, like his father, an eminent physician, having an extensive practice up to his decease. He bestowed his utmost care and exercised his highest skill in behalf of all his numerous patients, equally for rich and poor alike, and at all times.

"Over and above all book learning in the science of his profession, he possessed a natural and hereditary aptitude for it and its practice, which always stood him in good stead. It seems to be this in-born ability, and talent, not to dignify it with the title of genius, which in the medical profession, more perhaps, than in any other, enables the physician to render real service and win substantial success in curing cases. That and that alone, is the medical skill which patients receive and the public appreciate. Doctor Taylor, moreover, always brought to the bedside, and imparted to the patient steady courage and cheerful hope, in many instances more efficacious than medicine itself

"Thus, as a good physician, and a good man, Doctor Taylor the second, has lived a long and useful life, and dying leaves none but friends behind him. Honest and honorable in life here, he will surely continue to live with the honorable and honest hereafter.

"'There is no death;
What seems so is transition—
The portals of the fields Elysian
Which mortals miscall death.'"

TRANSLATIONS, GLEANINGS, ETC.

Why Cigars Are Harmful.—In a paper entitled "Some Points in Negative Therapeutics," Dr. G. Walter Barr (*Therapeutic Gazette*, June, 1890) writes as follows concerning cigars and their effects upon the nervous system:

The physiological action of nicotine is well known, and because it is a powerful substance when taken into the animal economy, it is like the notorious bad boy charged with all the trouble that occurs in the neighborhood. Several years ago I was struck with the intense results of a little cigar-smoking on my nervous system, and with the fact that these results varied very much in details from the physiological action of nicotine as reported by all authorities. This caused me to study the secrets of the cigar-maker's art and the different kinds of cigars from a physiological standpoint.

Cigars are popularly divided into two classes,—"good" and "bad." Each of these classes, or rather all cigars, are properly divided by the initiated into two other classes,—flavored and unflavored. The most popular cigars, and, consequently, the ones most often called "good," are the flavored ones; connoisseurs look with contempt on all flavored cigars. At least nine-tenths of the cigars sold in the United States are flavored, and I am confident I am correct in stating the general principle, that *it is not the tobacco, but the flavoring additions to the cigar that are harmful, in a practical sense, to the nervous system and digestion of man.*

The substances most used as flavoring adulterants of cigars are valerian, tonka and jamaica rum. * * * The quantity of each drug in one cigar is very small, indeed, but when smoked, the action of the drug is far out of the usual ratio of dose to effect. * * * The total effect of a highly-flavored cigar is to depress the action of the stomach and liver, slow the heart, produce a feeling of languor, and a headache between the eyes, dull to sharp, according to susceptibility. The effects depend for intensity on the quantity of flavor and the susceptibility of the person to its action. Many person not accustomed to their use can bring on all the symptoms of a torpid liver—anorexia, coated tongue, constipation—by smoking a few flavored cigars. The same persons can smoke a dozen unflavored cigars a day without in the least degree producing this effect. Flavored cigars tend to retard digestion; unflavored cigars do not. The effect of flavored cigars on the nervous system is manifold greater than that on unflavored ones.

The moral is, cause the man whom smoking is injuring to quit smoking *flavored* cigars, and in most of the cases you will accomplish all you desire.

The real difficulty is to distinguish flavored cigars. No reliance whatever can be placed on the word of the average salesman, as I have clearly determined by experiment. Many of them depend on the statements of the manufacturer's agent to them, which are very unreliable as a rule. The best method of testing is to draw through an unlighted cigar in a reverse direction,—the end usually lighted being in the mouth,—and then the presence of flavor can usually be determined by the practiced taste. All cigars which leave on the bottom of the box a brown stain are flavored, but the reverse does not obtain. A box of cigars may be flavored so as to deceive experts, but this is an extreme case. If the physician be not a judge on this point himself, he may get a friend engaged in manufacturing the weeds to pick out a few brands of unflavored cigars—of another's manufacture—sold in the town, and recommend these to clients who will smoke.

There are no unadulterated chewing tobacco, smoking tobacco, nor cigarettes; the users of these abominations may be deflected to cigars sometimes.

Hypnotism and Insanity.—From the *British Medical Journal* we learn that at the last August meeting of the British Medical Association, Dr. Auguste Voisin, physician to the Salpêtriére, discussed the treatment of insanity and neuroses by hypnotic suggestion, and the application of the method to the moral and instinctive reversion of backward and imbecile children. "Catalepsy ought to be carefully avoided," he said, because the hypnotized individual ought to be able to preserve the use of the senses, especially of hearing, but hypnotism was in his experience useful when it was possible to make use only of suggestion. He concurred with Braid that the hypnotic state originated in the nervous system of the hypnotized person. By hypnotism he erased hallucinations and delusions and disturbances of special and general sensation. Suicidal ideas and acute and furious mania disappeared under its influence. The treatment had also succeeded in the mania and agitation observed during the catamenia. Patients in this category had even remained asleep for from six to eight days. The method had also succeeded in dipsomania and morphinomania. Dr. Voisin had also been fortunate enough to cure obstinate cases of onanism in this way; had applied the method *á la moralisation des enfants depravés*. He had thus completely transformed their habits of thought,

and had brought them to love the good, whereas they had formerly only loved the evil. He had also succeeded in curing amenorrhea in the insane, which was a frequent cause of nervous and mental troubles; he particularly insisted upon this point as proving that it was possible to influence the sympathetic system.

In the discussion which followed, Dr, Yellowlees said his attitude of mind towards this paper was simply one of amazement. There was something that cured mania, banished hallucinations, cured love of drink and morphia, stopped masturbation, improved the memory, made imbeciles wise, and bad folks good; moreover, it cured amenorrhea, and the patient menstruated as directed. It resembled nothing so much as the waving of a conjuror's wand, and saying to disease, "Begone!" Moreover, in nine-tenths of the cases the cure was permanent. If all this were true, their vocation was gone, and they must seek some other profession. Dr. Voisin must not deem them disrespectful if they were a little incredulous as to these wonderful results. It might be there was something in the vivid Gallic nature that we had not here, or something in Dr. Voisin's method that they did not know. Certainly they had seen no such results from hypnotism here, and certainly he had never heard of results so amazing as those enumerated in Dr. Voisin's paper.

Remarks were made by other members, some in the same strain as the last, and others confirmatory of Dr. Voisin's results.

RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS.

Dry Cupping For Infantile Convulsions.—Dr. T. J. Heard says: "In nineteen cases out of twenty, infantile spasms or convulsions may be arrested in one minute by the application of one or two dry cups on the back, from the seventh cervical to the first dorsal vertebra. This will secure a remission, during which emetics, purgatives, or anything else that the indications require, may be used.

Sea-Water For Gonorrhœa.—In the *British Medical Journal*, Nov. 30, 1889, Mr. R. F. O'Brien, of Dover, says that during the past two months he has treated thirty-two cases of gonorrhœa by means of sea-water injections, the result being an average duration of disease under treatment of 8.87 days. Each case was kept under observation for about a week after the disease had quite disappeared, in order to ascertain if any return of the discharge occurred. Relapse occurred in one case only.

The treatment was by sea-water injections, undiluted, seven or eight times during the twenty-four hours, each injection being retained for a few minutes. Latterly warm sea-water injections have been used.

Should further experience confirm the above results, this would prove a method of treatment peculiarly suited to the naval and military services.

The advantages of the method are, that sea-water combines an alkaline and antiseptic, with a tonic action on the mucous membrane. It is cheap and universal; for where sea-water is not available, sea-salt would probably give nearly as good results. It also suggests itself for the treatment of other mucous membranes such as that of the vagina in vaginal leucorrhœa, etc. The addition of an astringent would probably give even better results, but nothing was used in the above cases other than sea-water.

Mutisia Viciœfolia.—This plant is a native of the Andes, and, according to Dr. Saac, its active principle is attributable to a bitter substance contained in the seeds. The Indians employ it in cardiac affections, epilepsy, and many other diseases, while Pereira is said to have obtained good results from it in hysteria. From the investigations of Dr. H. Rusby, it appears that this drug acts favorably in affections of the respiratory passages, but especially in the disturbance of cardiac action which is so often consequent upon ascent of high altitudes. In these localities coca is employed as a prophylactic and stimulant, while mutisia is used whenever there is any feebleness of the heart. Thirty-six different species of mutisia have been discovered.

Aerocomia Sclerocarpa.—This plant is found in South America. Its flowers have an odor which resembles that of oil and turpentine, and contain, besides traces of volatile oil, two per cent. of a brownish, yellowish resin which is soft, is soluble in ether and alcohol, has an odor resembling that of incense, and one per cent. of resinous acid, two per cent. of tannin and gallic acid. According to Peckoldt, these flowers possess great popular favor as a remedy in leucorrhœa, and as a gentle astringent in diarrhœa, hemorrhages and albuminuria.

Phosphorus in the Treatment of Rickets.—For the past two years Dr. Mandelstamu, of Kazan, in Russia, has been using phosphorus in small doses in the treatment of rickets, and during that time he has administered the drug to two hundred and fourteen patients of different ages suffering from the various forms of the disease. He concludes as follows: Clinical observations perfectly justify the employment of phosphorus in rickets. Phosphorus acts better, more quietly and more surely than any other drugs. The administration of the drug for a long time in small doses is well borne by children and does not produce any ulterior effects. Phosphorus acts favorably, especially in cases of symptoms depending upon the rickety diathesis. Under the influence of phosphorus, in the great majority of cases, the development of the disease is arrested.

The dose was 1 centigramme (3-20 gr.) to 1,000 grammes (1 qt.) of codliver oil, 1 dessert spoonful once or twice a day.

Creolin Injections in Dysentery.—Dr. Sosovski (*Lancet*, Aug. 3, 1889) has found large enemata of dilute creolin very useful in dysentery. He employed a one-half per cent. solution injected into the bowel twice, or sometimes three or four times daily, the quantity used for each enema being generally about five pints. The patients did not experience any burning sensation or abdominal pain. The treatment was employed in sixteen cases, not one of which proved fatal, although a considerable number of patients succumbed to the disease during the same epidemic. In two cases the disease was arrested after the second enema, in nine cases the bloody stools ceased on the third day, in two cases on the fifth day, in one on the sixth, and in one on the ninth. In addition to these, two children under a year old were treated successfully by means of creolin enemata. Again, another Russian physician, Dr. Kolokoloff, has used a one per cent. solution in a number of cases of adults with complete success.

Boro-Citrate of Magnesia in Urinary Calculi.—Dr. N. Perez (*Albany Med. Annals*, Sept., 1889) refers to the case of a boy, four years old, having a large calculus in his bladder. Before performing an operation, he tried the application of the boro-citrate of magnesia, of which he gave fifteen grains dissolved in an ounce of syrup, one to three tablespoonfuls every day. After three days of this treatment a good deal of white sediment appeared among the mucus in the urine, which continued about one month, the other phenomena disappearing.

Nitrous Ether for the Cure of Eczema Impetiginoides.—Dr. W. H. Sullivan, of RisingSun, Ind., writes to the *Cincinnati Lancet-Clinic*, Dec. 7, 1889, describing the curative effect of sweet spirits of nitre upon an eczematous affection of his face and hands. The disease began about ten months ago, and was treated by the most approved methods, without much success.

When about despairing of any good results, Dr. Sullivan was handling some nitrous ether, which was spilled on the affected parts. It produced immediate comfort, relieving the itching and gradually the discharge from the skin ceased. When itching or burning again occurred a thor-

ough application was made of the nitrous ether, and after the lapse of three weeks he describes the results as simply marvelous.

The writer is a physician of forty-one years' standing, a graduate of Transylvania University.

Eucalyptus in Cancer.—J. Brendon Curgenven writes in *British Med. Journal*, Dec. 7, 1889: I lately had a case of cancer of the breast in which the ulcerating surface was about 8 inches by 6. The odor from the discharge was most sickening and offensive, and it was made worse by the odor of the carbolic acid which they were using. No one could remain long in the room with the patient on account of the intolerable smell. The carbolic acid was stopped, and the eucalyptus disinfectant used. The wound was sprayed with it, as also the lint with which it was dressed; tenax was wetted with it and placed under the wound to catch the discharge, and, by the use of a spray diffuser, the air of the room was filled with the fragrant odor of the eucalyptus. All offensive smell at once ceased, and there was only the smell of an ordinary suppurating surface.

In a case of cancer of the sigmoid flexure where the discharge was frequent and very offensive, the injection of a small quantity of eucalyptus emulsion twice a day, stopped the offensive odor, and checked the frequency of the discharges. And in a case of cancer of the neck of the uterus, the offensive smell was stopped, the discharge lessened in quantity, and the tendency to hemorrhage diminished.

Iodine as a Remedy for Vomiting.—M. Darthier (*L'Union Med.*, Dec. 10, 1889) bears testimony to the value of tincture of iodine administered internally for the relief of vomiting, a remedy recommended by the late Prof. Lasegue in the vomiting of pregnancy. The author had observed its use in nineteen cases, eleven of which were tubercular subjects, and found that it is of more value in the vomiting of early phthisis than in that of the later stages of this disease. At the same time he gives instances of advanced cases with obstinate vomiting where the symptom was largely controlled by the drug. Amongst other cases he gives one of bronchial dilatation (subsequently fatal from acute tuberculosis) in a female, who for three weeks had regularly vomited after every meal. From the date of commencement of the use of the drug she ceased to vomit, and after a week's treatment, which was not productive of any signs of iodism, was completely cured of the symptom. Apart from phthisical vomiting, M. Darthier finds it useful in alcoholic gastritis, in ulcer of the stomach, and in the vomiting of pregnancy and chlorosis, instances of which are recorded. He says that the majority of patients take the iodine with pleasure; it often produces an agreeable sense of warmth in the stomach, lasting from five to twenty minutes. The dose is ten drops, dissolved in 125 grammes of water, taken in three portions immediately after meals. In a certain number of cases, symptoms of iodism are produced, chiefly coryza; but a good many patients do not experience any such inconvenience from it.

Artemesia Absinthium.—As a medicinal agent (says the *London Medical Recorder*) wormwood has gone very much out of fashion, although the drug possesses, when judiciously prescribed, many valuable properties. Dr. Corning points out that it has been employed in the treatment of epilepsy, chorea, and digestive disorders, while before the introduction of cinchona bark it was used in intermittent fever; it was also recommended as an anthelmintic, a discutient, and an antiseptic. But, whatever may be its value in other conditions, the author is satisfied that it has a remarkable tonic influence upon the brain, and especially upon those higher mechanisms of the organ which are so intimately associated with physical function. He is surprised, therefore, that it is not extensively employed in neurological medicine. In the treatment of those exhaustive conditions of the cerebro-spinal axis known as "neurasthenia," he has found it a valuable remedy; valuable because it dissipates in a few moments the hebetude, depression and indefinable sensations of malaise from which such patients periodically suffer. In depression, hypochondriasis and irritability, absinthe serves an excellent purpose for, by a conservative exhibition of the drug, the distressing psychical features of the case may be modified or entirely obliterated, for a time at least. This may be done without inducing more than a slight feeling of exhilaration, in no sense comparable to intoxication. This power of promptly relieving the most exigent symptoms, those of a mental character, the author regards as of vast importance, since it enables the physician to render the condition of the patient comparatively comfortable, while remedies potent, though lethargic in their action, may be employed for the permanent eradication of the disease.

(See article on "Absinthe in Epilepsy," in this journal for last April, page 29.)

Peroxide of Hydrogen in the Treatment of Pneumonia.—Dr. J. L. Greene, of Colorado, writes to the *Medical Record* that a year ago he conceived the idea that peroxide of hydrogen might be useful in treating congestive and croupous pneumonias prevalent in the Rocky Mountain region. Out of twenty-three cases treated by him since that time there have been twenty-two recoveries and one death. The death was in the case of a puny infant eleven weeks old and so far gone when first seen that any treatment whatever could avail but little. These cases comprised some with double pneumonia, some persons of robust habit, some with constitutions impaired by long intemperate use of alcoholic liquors, and several children ranging in age from three months to three years. The main treatment has been the internal use of peroxide of hydrogen, though he has used any rational measures that were indicated to meet complications, or unusual conditions arising in any case. The dose mentioned, says the author, in the rather scanty literature on the subject, as applicable to other classes of cases—a teaspoonful three times a day—is far too light for pneumonia. In the high line, or congestive form, common enough at high altitudes, the patient would exhaust the effect of the first dose, and die from apnea before the second would be due. He often gives one-fourth to one-half a teaspoonful, well diluted with water, once in five or ten minutes for an hour or more, with good results. In acute lobar pneumonia he usually gives half a teaspoonful, diluted, every hour, with benefit, even when no emergent conditions exist, and continues it till after the crisis occurs.

Faradic Electricity in Hysteria.—The following summary presents the leading points of a treatise by Prof. Didier, Lyon Medical.

1. Of all agents which have been used up to the present time to cure or prevent hysteric attacks, faradization is indisputably the best. It has never failed in any hysteric convulsive attacks; it was also in two out of three cases of hystero-epilepsy successfully employed. Hence in the latter it is of less reliability. Faradization is much to be preferred to the compression of the ovary, for the latter, if too frequently and forcibly employed, may result in injuries of the true pelvis; besides this, it can not be performed in pregnancy.

2. Faradization even renders it possible in doubtful cases, or in the absence of a physician especially experienced in these diseases, to diagnose an epileptic individual from one who is hysterical, be it hystero-epilepsy or convulsive epilepsy, as the hysterical, but not the epileptic fits, will cease on its application.

3. One may be able also to diagnose, if both of these neuroses are present at the same time, the different attacks according to their character.

4. If one be called in at the beginning of the attack, then one electrode should be applied upon the pit of the stomach, and the other upon the anterior cervical region; a

current of medium strength is used. In the attack itself, up to the clonic or tonic stage, one electrode should be applied to the posterior cervical region, and the other in the hand, or one in each hand.

5. Besides this abortive action, faradization also acts, as is well known, eminently curatively.

Suboxygenated Air in the Treatment of Phthisis.—At the Congress for the Study of Tuberculosis, which recently terminated its sittings in Paris, Dr. Valenzuela, of Madrid, read a paper on the "Curative Effects in Phthisis of Suboxygenated Air." The author advances the theory that in high altitudes the rarefied condition of the atmosphere necessitates greater functional activity in the respiratory apparatus, especially that portion formed by the thoracic parietes. As a given volume of the atmospheric air in high altitudes contains a considerably less weight of oxygen than air at the sea-level, to inhale the normal amount of oxygen increased respiratory activity is necessary, and to this, he says, and not to the greater purity of the atmosphere, nor to its dryness, is the beneficial effects of mountain air due. He found (*L'Union Medicale*) that in Spain the deaths varied in proportion to the elevation. In localities of over twelve hundred meters above sea-level phthisis is unknown. Acting on his theory that suboxygenation was, by causing increased respiratory activity, the beneficial agent, Dr. Valenzuela constructed pneumatic chambers, in which, by the addition of carbonic acid gas, he could diminish the percentage of oxygen present, and so increase the respiratory effort above the normal; this condition he usually kept up for two hours at a time and repeated the suboxygenated air treatment two or three times a day for some months, never less than two. He reports that of five hundred cases in the early stage, all recovered, and of one thousand cases taken at hazard, seven hundred and forty-eight resulted favorably; difficulty of breathing disappeared; the thoracic measurement increased; the weight of the patient was greater; and the urine had less uric acid and more urea. Before introducing his method of treatment to the profession, the author tested it for eight years in his laboratory in Madrid, and for four years in his hospital. Combining the vapor of iodine, iodoform, chlorine, sulphurous acid, eucalyptol, or any other medicated vapors, adds, in some cases, to the efficacy of the suboxygenated air.

Electricity as a Local Remedy in Pain.—In a paper read before the Philadelphia County Medical Society (*Times and Register*, March 1, 1890), Dr. Andrew Graydon says: As a pain reducer, I have never seen static electricity equalled in a single agent. Let me illustrate by a case, trifling as it may seem to you and me, but it was a condition which I was called upon to treat or turn away from as unworthy of notice. A young lady presented herself apologetically, in my office, with a bunion that crippled her. As she was a society girl, and very fond of dancing, it was a great annoyance to her. This trifling, little, insignificant bunion put a check on her pleasure. I was brought to see the fact, as it often happens in our practice, that what is almost contemptible in its littleness, enables us to get the confidence of the patient in graver matters. So it happened in this case. I insulated the lady, and, without removing the shoe during treatment, drew with the wooden ball electrode a fine spray of current directly from the painful spot. The application was pleasant, and followed by immediate relief, which was complete after four or five sittings. Again, a lady, in running for a street car, fell upon her knee. She came into my office about three hours after it had happened, with knee swollen, stiff and painful. Through all the thicknesses of her clothing the same mode of application removed all pain. A case of lumbago was given two treatments on consecutive evenings with the metal ball, sparks half an inch long, with the same happy results. Cases of neuralgic type yield to the spark applied over the painful area. Headaches not depending upon stomach derangements, show results that are marvelous. In these, and brain affections generally, the treatment is by the douche and brush; and sometimes the wooden ball and point. I have seen cases, without number, of nervous headaches, in which the drain upon the nerve-forces has been enormous, in the merchant, physician, lawyer, actor, student, housewife, in male and female, yield promptly to this treatment. In that class of senile headaches which defy routine treatment the results are most happy.

Hypericum in Pain.—Deprecating the use of mophia in surgical cases, Gilchrist says (*Northwestern Journal of Hom.*): hypericum absolutely prevents pain in any kind of operation which is painful in nature. It makes no difference in what form you administer it, whether in the tincture, the thirtieth, or two-hundredth, the result is the same. I know that many think where there is any mechanical obstruction it is necessary to give an anodyne.

Rest in the Treatment of Tetanus.—We are told by *Chamber's Journal* that Prof. Renzi, of Naples, has treated successfully several cases of tetanus, by absolute rest for the patient. This absolute rest does not mean simple release from labor, but includes rest for the several senses as well as for the body. The ears of the patient are closed with wax, the room is darkened, and the floor is heavily carpeted. Every fifteen minutes the nurse enters with a shaded lantern to attend to his wants, and to administer food such as eggs, milk and other fluids. Nothing solid or requiring any attempt to masticate is given. Sedatives are administered as required to relieve pain. It is said this treatment shortens but little, if any, the length of the disease, but it lessens the force of the paroxysms, which gradually cease altogether.

Common Salt in the Treatment of Pleuritic Effusions.—Dr. Tom Robinson, in the *British Med. Journal*, relates a case of pleurisy with effusion, accompanied with "cold clamminess of hands and brow, and breathing fifty-one times in a minute, the pulse barely appreciable at the wrist, and the heart pushed over to the right." He was ordered a teaspoonful of common salt dissolved in a wineglassful of water every hour, at the same time sweating by a hot wet flannel and a piece of waterproof sheeting. At the same time two ounces of the common black draught were administered, and all fluids were stopped. Two hours afterwards he had most markedly improved in every way, his respiration being forty-eight per minute. In ten hours "he could lie on either side and get well down in bed." Next day there was no embarrassment of breathing, and all his subject symptoms had disappeared. He was now given one drachm of common salt twice a day, with good nourishing food, and in a week he was up and out of doors.

Damage of Syphilis.—The tissues of a person who has had syphilis are to be regarded as damaged, and so permanently placed at a disadvantage for the wear and tear of existence. They are liable, under slight irritation, to take on an inflammatory condition, which is apt to become chronic. Hence the presence of palmar psoriasis from the friction of an umbrella or walking-stick, and psoriasis of the tongue from the irritation of tobacco smoke or carious teeth. Further, this peculiarity of the tissues damaged by syphilis must obviously predispose to chronic inflammatory affections of the circulatory and nervous systems, and so pave the way under suitable conditions for ataxy or impairment of the cerebral circulation.

Iodine as a Prophylactic Against Croup.—The subject of the prevention of croup has been studied by Dr. Dumas for several years, and he has tried a great many substances with this object in view. The agent which he thinks best of is iodine, given internally in quantities not exceeding eight drops daily. He quotes a number of cases where there was every reason to suspect an attack of croup, and where the use of this remedy appeared to prevent its onset.

Wonderful Eyes.—John Thomas Helsop, of Birmingham, England, is a lad who is known as "the living microscope" on account of being able to see the most minute objects clearly defined. In 1878 or 1879 he was attacked with some baffling eye trouble and came very near losing his sight forever. After the disease had reached its worst there was an instant and startling change for the better, which resulted in a complete cure of all inflammation in an incredibly short time. It was not a cure, however, that brought back the old eyesight like that possessed by the average human being. When it returned it was with extraordinarily-increased powers of vision. To John Thomas the most minute plant-louse was as large as a rabbit, and the mosquito's bill as big as an axe handle.

He could see and describe distant minute objects with startling clearness and precision. He was amazingly shocked upon repairing to the well to see the immense number of hideous creatures that were floating, fighting and wriggling about in the water.

From that day to this water has never passed the lips of John Thomas Helsop; his drink consists wholly of coffee, tea and milk, thoroughly boiled. The doctors say that the entire organization of the eye has undergone a structural change; that the cornea has become abnormally enlarged, and that the crystalline lens has divided into three different disks or circles, each circle surrounded by another of light-blue. In the center of each of these three circles appears an iris, greatly diminished in size, but an iris nevertheless. Medical reports have been made on the case by journals such as the *Lancet*, *Medical Times* and many others. The young man has been visited by all the greater and lesser lights of the British medical colleges, each of whom pronounced his case the most wonderful in the annals of optics.

[This interesting story is credited to the *St. Louis Republic*. The "Medical Reports" alluded to have so far escaped our observation. Whenever they turn up, we shall be glad to republish them, either wholly or in part.]

A Cure for Hyperidrosis.—Dr. St. Clair, of Brooklyn (*Med. Summary*), has used for several years, with the best results, a powder known as streupulver. It is composed of three parts salicylic acid and eighty-seven parts silicate of magnesia. It is used in the German army for sweating feet. In night-sweats of consumptives, its beneficial effect is immediate and permanent. To prevent breathing the powder, and the coughing it would cause, a cloth should be placed over the face, while the whole body is rubbed with the powder. Once a day for three days, then every other day for a week, will be all that is required.

The Action of Caffeine.—A paper on this subject, by MM. See and Lapicque, concludes with the following summary:

1. Caffeine in small and repeated doses, about 60 centigrammes a day, facilitates muscular work by augmenting the activity, not directly of the muscle itself, but of the motor nervous system, cerebral as well as medullary. The consequence of this double action is to diminish the sensation of effort, and to avert fatigue, which constitutes a nervous, and at the same time chemical, phenomenon.

2. Caffeine prevents breathlessness and palpitation consecutive to effort, which is of great importance.

3. It thus immediately communicates to a man who gives himself up to violent and prolonged exercise, the aid that he requires.

4. In producing this excitation of the cerebro-spinal motor system, on which depends the augmentation of the muscular tonicity, caffeine augments the waste of the carbon of the body, and particularly of the muscles, but does not restrain the nitrogenous waste. It, therefore, is not, in the strict sense of the word, a means of saving (*Moyen D'Épargne*).

5. A saving action in general can take place in the higher animals in a complete manner to prevent the injurious effects of fasting, only in a condition impossible to realize, namely, inaction or immobility, more or less absolute, where there is little expenditure without work. With caffeine we observe just the reverse, that is to say, intense work can be obtained by means of this agent only at the expense of the wear and tear of the organism. The animal machine can work only in consuming combustible matters, and it is precisely by promoting this combustion that caffeine permits muscular work even during fasting.

6. Caffeine has not, as is generally believed, the marvelous property of replacing food; it only replaces the general tonic excitation which the ingestion of food produces. It is admitted that it is the direct and instantaneous action of the aliments which stimulates the stomach and nervous system, and that their alimentary value is at first nothing; one stimulant might be substituted for another. Caffeine, far from sparing the reserves, will place a fasting man in a position to undertake his work only by attacking these reserves, the destruction of which it hastens by the excitation of the nervous system, and, through the latter, of the muscles; the organism must then soon use up its nutritive supply, and caffeine will not prevent it. It is, nevertheless, of incontestable though temporary utility for the physical forces.

Apomorphine in Croup.—Dr. Alexander F. Samuels writes to *Therapeutic Gazette* that he finds apomorphine of the utmost value in croup. He dissolves 1-8 gr., pellet form, in six teaspoonfuls of water and gives a teaspoonful every five or ten minutes until emesis results. The second or third dose usually does the work. When the child is past swallowing, the remedy is given hypodermically, of course in less water. He has no dread of croup, if only he has the apomorphine pellets with him.

Cremation by Electricity.—A movement is said to be on foot looking to the erection of a new crematory wherein bodies are to be incinerated by electricity. The scheme is regarded as a feasible one, and it is believed will do much towards removing the prejudice existing against cremation by the elaborate method practised in Pennsylvania, Long Island and elsewhere. The electrical crematory is the invention of a Sicilian; the heat is generated by a dynamo of a pattern similar to that used in the incandescent light system, and succeeds in evaporating, as it were, the bodies, till nothing remains.

Embalming Dead Bodies.—Dr. H. R. Tilton, U. S. A., writes (*Medical Record*): The following formula will preserve the body, if the injection is properly done: Take of the solution of chloride of zinc (U. S. Ph.), one gallon; solution of chloride of sodium, six ounces to the pint of water, six pints; solution of bichloride of mercury, one ounce to the pint of water, four pints; alcohol, four pints; carbolic acid (pure) one-half pint; carbolic acid dissolved in glycerine, one and a half pint. Mix all the ingredients and a clear solution of three gallons results, which is the proper amount for a body weighing one hundred and fifty pounds. The solution may be injected into the aorta, but is much less trouble to inject into the brachial or femoral artery, or the femoral vein may be selected. If an artery is used, the injection may be toward the capillaries, and if a vein, toward the heart. To satisfactorily inject a subject a good anatomical syringe is desirable, but a gravity syringe can be improvised with rubber tubing, a stopcock, and a terminal glass tube with the tip drawn to a fine point. I have found that a fluid drachm of the solution recommended is sufficient for each ounce of weight of the animal to be preserved. For preserving human bodies two and a half fluid ounces for each pound is a safe estimate.

Galvanism in Vaginismus.—Dr. Lomer (*Bost. Med. and Surg. Jour.*) gives the history of two cases of marked vaginismus where the application of galvanism resulted in a perfect cure. One patient, twenty-two years old, had been five years married, and complete coitus had never been possible. Treatment with specula of increasing size had only made her condition worse, and her mental state was becoming deplorable. Examination under ether showed nothing abnormal with vagina, cervix or uterus.

Galvanism was applied with one pole on the abdomen, the other on the perineum or introitus vaginæ, and only so strong that the patient could just feel it. The applications were made at first every other day, then every third day, and at last only once a week, and lasted four to five minutes. Improvement gradually took place until first one and then two fingers could be introduced without pain. In six weeks the cure was completed, and there has been no return of the trouble for six months.

The second case was a woman twenty-seven years old, had been two months married, and suffered from extreme vaginismus. No improvement following other treatment, the constant current was applied in the same manner as above, with a resulting cure after five weeks of treatment.

The author noticed that the dysmenorrhea, which in both cases was severe, was much relieved by the galvanism, and that more powerful currents could be borne early in the course of the treatment than later, when the special sensitiveness to the touch had diminished.

The Manufacture of Cream and the Purification of Milk by Machinery.—The sterilization of milk is playing an important part to-day in the domain of sanitation and hygiene, but as the scientist makes his way forward, he is led to doubt whether sterilization covers the entire ground, remarks a writer in *The Dietary*. Here is Dr. R. Tilley, of Chicago, sounding a note of alarm in the *Western Medical Reporter*, where he describes the separation of cream from milk by centrifugal force, and shows that this milk, though fresh from the cow and carefully strained, leaves an unpleasantly perceptible residue upon the machinery of the separator, this residue consisting of blood, hair, manure and general debris, in which tubercle bacilli are revealed by the microscope. Dr. Tilley does not think that sterilization offers a perfect solution of the problem of purification; for, he says, "of course, it may be said, if the milk is sterilized that settles the question, and there is no further need of any other device. It is not, however, agreeable to eat or drink sterilized dirt." Filth is shown to be present in milk fresh from the cow, even after it is strained. Before the "separator" revealed and removed it its presence was not suspected. Sterilization only renders this filth innocuous. Thus the subject may be summed up.

Among the manufacturers of condensed milk the Howell Condensed Milk and Cream Company, situated at Goshen, Orange County, N. Y., is said to be the first to have profited by the lesson taught by the "separator" in their cream factory. The following is their method of manufacturing cream:

The milk on being received from the farmers is carefully examined by a trained milk inspector employed by the company. It is then immediately passed through double strainers and allowed to flow into a large tank, in front of which is arranged a battery of ten separating or skimming machines. These consist of hollow steel balls, slightly flattened, about twelve inches in diameter. They are set upon upright shafts, and are revolved at a speed of from 7,500 to 8,000 revolutions a minute. Above are arranged tin caps or hoods, with outlets, into which are emptied the skimmed milk and cream as they are discharged from the neck of the machines. The warm milk is fed from the vat or tank into the machines through an opening in the top, and as soon as the milk strikes the bottom of the bowl it is instantaneously broken into a fine spray, and thrown from the center by centrifugal force, the cream, being the lighter body, remaining near the center, while the skimmed milk is thrown to the circumference. As the cream and skim milk accumulate in the machines they are discharged through their respective outlets at the mouths of the bowls. By a simple adjustment these machines can be so arranged as to produce either light cream, similar to the old-fashioned hand skimmed product, or cream so dense that it will scarcely run when cool. A forty-quart can of the light cream if churned will yield twenty pounds of butter, while the heaviest cream made will produce fifty pounds of butter to the can. Cream may be made by this process from fresh, warm milk, recently drawn from the cows and not yet two hours old. The cream, after leaving the machine, is passed over a cooling apparatus and rapidly reduced to 38° F.

The accumulations of foreign matter in the milk alluded to above are deposited upon the machines by this process, and form a decidedly unpleasant looking mass. It is stated that no strainer can be made fine enough to isolate this matter from milk.

So important is this method of purification by machinery that the Howell Condensed Milk and Cream Company go to the expense of passing all their milk through these machines before it is condensed, not relying alone upon the straining process that is the sole remedy with nearly every other manufacturer of condensed milk.

The Etiology and Treatment of Enuresis Nocturna.—Dr. Oberlaender (*D. Med. Zeitung*) enunciates the following theory: enuresis nocturna in boys and girls, unless there are found some grave defects in development, is always due to reflex irritation in the urethra or other terminal openings. The neurotic theory of the affection is not sufficiently grounded. The author adduces as evidence for the correctness of his theory the excellent results obtained by circumcision, the tearing apart of adherent preputial folds, and dilatation of narrowed meatus urethræ. Stenosis may occur to other parts of the urethra just as well as at the meatus, and requires similar treatment.

Dryness of the Throat.—Dr. Solomon Solis-Cohen (*Medical News*) gives the following formula for the relief of dryness of the throat and mouth, which characterizes both acute and chronic morbid conditions of the mucous membrane. The ingredients are compounded in the form of a lozenge, to be dissolved gradually in the mouth:

Fluid extract of pyrethrum	2 or 3 minims.
Pilocarpine hydrochloride	1-32 grain.
Pure extract of licorice	2 grains.
Powdered acacia	2 grains.
Glycerine	1 minim.
Sugar, enough to make	20 grains.

One of these may be taken every two, three or four hours as may be indicated. Speakers and singers have informed the author of the preparation that the taking of some such lozenge just before a lecture or concert has enabled them to perform their part with comfort, which otherwise would have been attended with both pain and fatigue.

Effect of Civilization on Childbirth (Lapthorn Smith, in *Va. Med. Monthly*).—1. Dilatation is becoming more painful, being now agonizing, instead of almost painless. The muscles make a great outcry, but do very little work.

2. Dilatation by hydrostatic pressure is often wanting, because the amniotic membrane breaks at the very beginning of labor, causing what is now very common, a dry labor, in which dilatation is performed unequally, by the child's head.

3. The recumbent dorsal position after labor leads to retroversion with leakage of secretions, through the tubes,

into the peritoneal cavity, with pelvic peritonitis and fixation of the tubes and ovaries.

4. According to the law of the survival of the fittest, the woman with the narrow pelvis, if left to nature, would die, and thus would perish that breed of women; but by the intervention of art she is preserved to have several ill-formed daughters, so that we may expect such cases to become more common, as is actually the case.

5. While civilization is making the pelvis smaller (by atrophy of the muscles attached to it, etc.), it is also making the head of the child larger, for in the struggle for existence the big-headed man, and not the strong-armed one, has the best chance for survival. Art steps in to save those big-headed children whom nature used to exterminate.

6. Civilization is gradually removing the sexual feeling from women. This may be explained in two ways: 1st, By educating women to suppress these feelings since several centuries. 2d, By natural selection, civilized men generally choosing for marriage those women who can best conceal their sexual feelings, and who consequently will transmit this quality to their female children, while the women who can not suppress their sexual feelings are generally not married, and so die out.

The Danger of Narcotics During Lactation.—Ringer, in his *Hand-Book of Therapeutics*, under Opium, writes: "It is important to bear in mind that the active principles of opium pass out with the milk, so that a child at the breast may be dangerously affected by opium given to its mother."

Post Mortem Treatment.—To handle the eyes (be it ever so gently) after death, is apt to leave discolorations, says a writer in *Trained Nurse*. Make a compress of several folds of linen, and, after closing the eyes, apply to the lids till the undertaker takes charge of the body.

In a case where it fell to my lot to lay out the body, I packed both rectum and vagina as carefully as possible with cotton, but whether from the nature of the disease or from what cause I do not know, it was impossible to prevent constant purging. When the undertaker arrived, he said that no undertaker for the past ten years had used anything for that purpose but common table salt. The method is, after washing carefully, to fill as much as possible both vagina and rectum with table salt. Take a handful and press closely to the parts; then put two or three handfuls close to the body inside the napkin. He told me it made no difference what distance the body was to be carried, there would be no unpleasant results if it was cared for in this manner; that the salt acted as an astringent to the discharges. This method is far less work, and at the same time neater and more effectual.

A New Laparotomy Table.—Dr. Geo. M. Edebohls, of St. Francis Hospital, describes briefly in the *Medicinische Monatschrift* for June, 1870, a new laparotomy table of his own construction, made of galvanized iron and two glass plates, one for the chest and head, to remain dry, the other for the abdomen, pelvis and thighs, having a trough around it to catch the irrigating fluid, whereby the operator and assistants avoid wetting.

Case of Respiratory Paralysis after Diphtheria.—Dr. Geo. W. Rachel reports, in the *Medicinische Monatschrift* for June, 1890, the case of a three year old child which, after a pronounced attack of diphtheria, recovered from in two weeks, showed three weeks thereafter symptoms of general paralysis, and ten days later a great and persistent aggravation of the same, together with intense dyspnœa, but diminished chest movement and inability to cough. Upon inspiration the lower chest was expanded whilst the completely relaxed abdomen, instead of slightly rising, sinks. Upon expiration the reverse occurred. The diaphragm then was evidently paralyzed. Despite the great dyspnœa, contractions of the accessory muscles of respiration were not appreciable. Breathing was, therefore, carried on chiefly by the intercostal muscle. From this condition the patient gradually recovered under the continued use of nux vomica and strychnia.

This case is interesting because of the late appearance of the paralysis, namely, after the patient was up and about, in that the action of ptomaines alone as a cause is thereby rendered doubtful, and furthermore, because of the persistence of function in those respiratory muscles (intercostals) that possess a spinal as well as a cerebral centre, in that, as sometimes in young animals, rhythmic respiration may be carried on without the brain or medulla oblongata, and, indeed, without the cervical spinal cord.

A Lofty View of the Physician's Calling.—Medicine (said Dr. David W. Cheever, in a recent address) is not a trade; it is the noblest profession. Cling to that thought; never let go of it; the love of your calling; the relief of poor human suffering, the pursuit of science for its own sake. So surely as you choose the baser and material view, so surely your success shall turn to ashes in its fruition; so surely as you nourish the sacred flame of professional and scientific ardor, so surely shall you be warmed, sustained, upheld amid reverses, calumny, disappointments.

If you are thus just to yourself, be as careful to be just to other doctors. The golden rule is the true code of ethics. Be gentlemen, and not rude, grasping boors; respect others' rights, and yours will be respected. In no calling does bread cast upon the waters so surely return after many days. I have come to believe more and more that no effort is ever lost, no work but brings back some result. If you maintain your honor, your industry, your health, there is nothing to fear.

Cocaine in Infantile Diarrhœa.—Dr. K. I. Graves, in the *Chicago Medical Times*, writes: I have found that bathing the gums at intervals of half an hour with a four per cent. solution of cocaine served to arrest diarrhœa in children in whom this symptom was evidently due to irritation from teething.

A New Infallible Sign of Pregnancy.—Compes, in *Berlin. Klin. Woch.*, '85, No. 38, says that Reinl has recently written calling attention anew to Hegar's very sure sign of pregnancy, namely, the very great pliability of the lower segment of the uterus, which stands out in bold contrast to the density and rigidity of the cervix. From his position in the Freiburg Clinic and by means of a very large number of cases of pregnancy in the first month, he can confirm this statement. The author wishes to draw the attention of the profession to these facts, which have hitherto had but little consideration.

The index finger is introduced into the rectum, after which the thumb, being introduced into the vagina, rests upon the os, then moving it backwards to reach the sac of the internal sphincter ani. Provided this does not succeed, one half pint of warm water can be injected into the rectum. Then with the free hand he presses inward just over the symphysis towards the rectum, so as to engage between the fingers the lower segment of the uterus in the neighborhood of the cervix; in this way he examines the middle and the sides and then all sections of the body of the uterus. This compressibility is found in all possible stages of pregnancy. Under other circumstances, pathological conditions, and peculiar phases of gestation it is never observed. They came to this conclusion, because the lower segment of the uterus is the thinnest part of the entire body of the uterus, because it also during pregnancy

becomes relaxed and succulent, and because the contents, on account of the greater elasticity likewise of the wall of the upper sections of the uterus, can become displaced by the light weight in it.

This proof is positive; where it is present pregnancy is in the highest degree probable.—*Central für Gynäkol.*, Dec. 19, 1885.

Morvan's Disease.—Dr. Morvan, who is a physician practising at Lanilis, in Brittany, described in the *Gazette Hebdomadaire* for 1883 what he called "Analgesic paralysis, with whitlows on the superior extremities." When his first patient, a man, came before him, before opening the abscess he told him not to flinch, and to his great surprise he found that the man did not move in the slightest, because he had not felt the knife. Morvan and others have published several other cases in French journals, and Jurgensen has described one in the *Berl. Klin. Woch.*, 1889. Charcot has collected all these references in an article in *Le Progrés Médical*, March 15, 1890. It appears that the chief features of the disease are first, pain in the fingers, and then paralysis with wasting of the muscles, first of the hand and subsequently of the forearm; the pain soon passes away, and is succeeded by anesthesia and analgesia, then indolent abscesses appear scattered about on the face and forearm. The last stage is necrosis and sloughing of the bones and soft parts, especially of the hand. The temperature of the affected parts is low. The disease begins sometimes in one hand, sometimes in another, but it always soon becomes symmetrical in the hands and forearms. It is extremely slow in its progress. Some of the patients have remained under observation for twenty years. No means of arresting its progress is known. It has to be distinguished from Reynaud's disease, from that form scleroderma which affects the hands symmetrically, and from leprosy, but the diagnosis from all these is easy. Morvan's disease, however, much resembles the condition produced by some forms of syringomyelia, and the resemblance is the more close because cavities in the spinal cord are much more frequent in the cervical region than elsewhere. In syringomyelia the muscular atrophy is more marked and more extensive than in Morvan's disease. The disturbances of sensibility are more widely distributed in the former, but all are not equally lost, for the patient may feel pain, but can not distinguish between hot and cold objects, and, lastly, in syringomyelia any trophic disturbance may occur; the presence of abscesses is accidental, but it is characteristic of Morvan's disease.

Charcot's Disease.—Charcot's disease is essentially an osteo-arthritis the bony structures being the seat of the changes all through the affection. When the synovial membranes and fibrous tissues about the joint are first affected, afterwards extending to the ligaments and bones, the disease is *chronic rheumatic arthritis*. In *Charcot's Disease* the structures are hypertrophical; in arthritis they are atrophical. The former disease is almost painless; the latter is very painful. In the former there is fever; in the latter, none. And in Charcot's disease there is no patellar reflex; in arthritis, it is always present, either in both limbs or in the one opposite to the affected joint.

Criminal Adulteration.—Adulterations of foods (says the *Times and Register*) are, of course, frauds upon the consumer, but fortunately most of them are harmful only to the buyer's pocket-book. There are some, however, that are most dangerous, criminally so, and one of these is the substitution of the "tonka" for the vanilla bean. Recent investigations in a case of ice cream poisoning have conclusively shown that the poison was not contained in the milk, but in the vanilla, the latter having been made from the poisonous tonka bean, because it costs about one-fifteenth as much as the vanilla bean.

Extraordinary Music-Deafness.—Mr. Edwin Cowles, editor of the *Leader*, Cleveland, Ohio, who died March 4th, had a most curious privation of the musical sense of hearing. It was to the ears what color-blindness is to the eyes. He never heard the sound of a bird's note, and until he grew to manhood he always thought the music of the bird was a poetical fiction. "You may fill the room with canary birds," he once said, "and they may all sing at once, and I would never hear a note, but I would hear the flutterings of their wings. I never heard the hissing sound in the human voice, consequently, not knowing of the existence of that sound, I grew up to manhood without ever making it in my speech. A portion of the consonants I never hear, yet I can hear all the vowels. About a quarter of the sounds in the human voice I never hear, and I have to watch the motions of the lips and be governed by the sense of the remarks in order to understand what is said to me. I have walked by the side of a policeman going home at night, and seen him blow his whistle, and I never would hear it, although it could be heard by others half a mile away. I never heard the upper notes of a piano, violin or other musical instrument, although I would hear all the lower notes."

A Cure of Laryngo-Bronchial Croup by Pilocarpin.—Dr. W. Plattfaut, in the *Medicinische Monatschrift* for June, 1890, reports a case of extensive croupocis laryngo-bronchitis in a seven year old child, with intense dyspnœa and failure of the vesicular pulmonary murmur, having a cardiac murmur over the pulmonary artery and a history of a previous attack of rheumatism of the joints. He gave pilocarpin 1.1600 at first every half hour, a teaspoonful until within sixty hours 0.3 gram was taken. Seven hours after the first dose the patient expectorated a leathery cast of the larynx and trachea; after that, a continuous expectoration of tough matter that floated in water, resulting in removal of the cyanosis and restoration of the vesicular murmur at first in the right lung.

Ichthyol in Erysipelas.—Dr. Nussbaum of Munich has treated traumatic erysipelas with an ointment of vaseline containing ten per cent. of ichthyol. The drug has an irritating effect on the skin when its application is contiuued over three days, but in all the cases treated a cure was effected within that time.

To Clean Tartar from Teeth.—(*Scientific American.*)

℞ Dry Hypochlorite of Lime..... ʒ ss.
Red Coral..... ʒ ij. M.

S.—Triturate well and mix thoroughly. To employ it, moisten a new brush slightly, dip it into the powder, and apply to the teeth. A few days' use will produce a marked alteration in the appearance of the teeth.

Supervision of Ocean Steamers.—Dr. William M. Smith, health officer of the port of New York, has presented a very important report on the want of proper medical supervision in the Atlantic steamships. He gives some striking instances of the dangers caused by the lax manner in which infectious diseases are dealt with. Like most others who have given attention to this subject, he is of opinion that a medical marine service ought to be instituted, and that a surgeon should be discharged from office only as the result of charges made and sustained before a Government board. The present unsatisfactory status of ship surgeons is a subject which demands the attention of the profession in this country, and the work is one in which the British Medical Association through its Parliamentary Bills Committee may bear a part. There is little doubt that the letter of the law is frequently violated, and its spirit still more often. Dr. Lett, of England, has published certain instances of infraction, but what is wanted at the present stage are further examples from other sources.

The Use of Chloroform in Natural Labor.—Charpentier (*Bull. et Mem. de la Soc. Obst. de Paris*, 1889, No. 5) sums up his experience in the following propositions:

1. Chloroform given in small doses produces a condition of physical and moral calm in the patient.

2. If the inhalations are prolonged for a considerable time, the result will usually be a diminution of the uterine pain, the perceptions of the patient become less keen and the uterine contractions are slower.

3. If the period of complete anesthesia is reached with analgesia there is surgical and not obstetrical anesthesia.

4. In some cases chloroform excites instead of calming, and in such cases its use should be discontinued.

5. In some cases chloroform has unquestionably diminished the contractility of the uterus, and has thus been the cause of more or less severe hemorrhage after labor.

6. Chloroform has no action upon the fetus.

7. Chloroform given during the period of expulsion has a less decided effect upon the contractions of the abdominal muscles and the resistance of the perineum than is generally supposed. The sensation at that period is not entirely abolished, the contractions are frequent, and Charpentier has failed to notice that which has been called by Campbell disassociation of the sensations of touch and pain.

Chloroform is especially indicated—

1. In primiparæ who are nervous and excitable, and in whom pain may even cause delirium; also in those with whom the labor is greatly prolonged, thus becoming a source of danger.

2. In all cases in which there is spasm, contraction or rigidity of the neck or body of the uterus.

Contra-indications are the absence of severe suffering, the existence of placenta previa, general prostration, disease of the circulatory or respiratory organs, cerebral disease, alcoholism, etc.

Recognition of Dislocation of the Stomach.—Dr. C. A. Ewald, physician-in-chief of the Augusta Hospital, Berlin, gives in the *Berliner Clin. Wochenschrift*, Nos. 12 and 13, 1890, a method of detecting dislocation of the stomach and colon which, at times, with the liver and kidneys also, are to be found lower than normal: namely, by filling one or both of them, respectively *per oram* and *per anam*, with air, whereupon the lesser curvature of the stomach, or the borders of the colon may be distinctly defined.

The Aseptic Suit.—This invention consists of an aseptic suit or dress, the object being to provide means of protection to physicians and others against contagium while attending persons afflicted with contagious diseases.

The device consists essentially of a suit or dress adapted to be readily adjusted over the ordinary clothing, so as to entirely cover the wearer, said dress being made almost entirely of material impervious to atmospheric air, such parts as do admit the passage of atmospheric air consisting of germ-proof material.

The aseptic suit, while preserving every sense for accurately diagnosticating and treating all contagious diseases, and offering positive immunity to the wearer and to transportation of infecting germs to others, may it not be reasonably expected that in this invention is found a device which in the hands of intelligent physicians will absolutely stay the spread of contagium.

Dr. J. L. Rollins, of Auburn, Cal., is the inventor.

Glycerine in Acute Fevers.—Semmola (*Jour. de Med.*) gives the following: pure glycerine, 150; tartaric or citric acid, 1; water, 300 parts. Of this mixture from four to nine teaspoonfuls may be dissolved in water and given every hour. It is a very agreeable drink, in no way incommodes the stomach, and produces no intestinal derangement. Under the use of this medicine the quantity of urea diminishes.

To Tell the Approach of Death.—Dr. Chiappoli states that he has frequently noticed in patients apparently very far from death, an extraordinary opening of the eyelids, so much so as to give the eyes the appearance of protruding from their orbits, which he considers an invariable sign that death will occur within twenty-four hours. In some cases, when only one eye is wide open while the other remains normal, death will not follow quite so rapidly, but will take place inside of seventy-two hours, there not being the slightest chance of recovery after these symptoms set in, however remote final dissolution may seem to be. Chiappoli says that he is utterly at a loss for an explanation of this death symptom, but ascribes it to a diseased state of the sympathetic nerve.

On Lack of Conscience as a Means of Success.—The following closes an editorial in the July *Century* with the above title: "The fact is, that there is almost too much reverence for rascals, and for rascally methods, on the part of tolerably decent people. Rascality is picturesque, doubtless, and in fiction it has even its moral uses; but in real life it should have no toleration; and it is, as a matter of fact, seldom accompanied by the ability that it brags.

"One proof that the smart rogue is not so smart as he thinks, and as others think, is that he so often comes to grief. He arrives at his successes through his knowledge of the evil in men; he comes to grief through his ignorance of the good in men. He thinks he knows 'human nature,' but he only half knows it. Therefore, he is constantly in danger of making a fatal mistake. For instance, his excuse to himself for lying and trickery is that lying and trickery are indulged in by others—even by some men who make a loud boast of virtue before the world. A little more or less of lying and trickery seems to make no difference, he assumes,—especially so long as there is no public display of lies and tricks,—for he understands that there must always be a certain outward propriety in order to insure even the inferior kind of success he is aiming at. But, having no usable conscience to guide him, he underrates the sensitiveness of other consciences,—and especially the sensitiveness of that vague sentiment called 'public opinion,'—and he makes a miscalculation, which, if it does not land him in the penitentiary, at least makes him of no use to his respectable allies; therefore, of no use to his semi-criminal associates; therefore, a surprised, miserable, and vindictive failure."

Sleeping in the Woods.—In one of the German health-resorts, the *Allgemeine Medicinische Central-Zeitung* states, the experiment was tried this summer of having the patients with pulmonary disorders sleep all night in the open air in the pine woods. The hammocks used to rest in during the day were provided with pillows and bed-clothing, and a party of five, two ladies and three gentlemen, spent their nights in the woods with no roof over their heads. The experiment was very successful, the patients slept better than they had been able to do in their rooms, and all declared themselves as feeling much more refreshed by their sleep than usual. It is proposed next summer to provide accommodation for a larger number of patients in the forest, so that the experiment may be tried on a large scale.

Use of Magnetism in Surgery.—A man's eye was saved the other day by the use of a magnet. The man was working in a boiler shop, when suddenly a steel splinter from the edge of a chisel struck his left eye, burying itself in the eyeball to such a depth that the doctor was unable to extract it with a forceps. A powerful magnet was then applied to the wound, and a splinter of steel one-sixteenth of an inch in width and three-eighths of an inch in length was drawn out.

MISCELLANY.

—Andus says that fifteen grains of resorcin, in a glass half full of water, given during an attack of asthma is attended with prompt relief.

—Dr. Rutherford thinks that hydrastis is far superior to ergot in cases of uterine hæmorrhage.

—Salicylic acid, one drachm to the ounce of collodion, applied to corns at night will, it is said, in a few applications entirely remove them.

—A writer in the *Medical Record* reports twenty-three cases of convulsions of eclamptic women treated successfully with three drop doses of veratrum viride repeated hypodermically in one hour, then two drops every hour or two till the patient has a cord-like feeling in the neck.

—Ordinary earache is relieved by introducing on a little cotton a mixture composed of five drops of camphorated chloral, thirty of glycerine and ten of the oil of sweet almonds.

—Dr. Kingsbury, in the British *Medical Journal*, uses in erysipelas, always with marked relief, a fifty per cent. solution of ergotine applied with a camel's hair pencil on and around the affected part, repeated frequently.

—A banquet was recently given by the wine-dealers of San Francisco in which two glasses for each wine were set at each plate, one for the native and one for the foreign wine. The native wine was pronounced the best.

—Not long since, while reading a history of "provings" of nux vomica, we learned that the patient was despondent and buoyant alternately, and that he had a desire to talk about his condition. Constipation and an occasional sticking pain in the right ear and a sensitiveness of strong odors were also noticed. He had pimples on his chin, and his dreams were full of bustle and anxiety. On going upstairs he was anxious to get to the top. As we had previously observed that the same symptoms followed the use of pumpkin pie, with the exception that the patient tripped up on a dust pan on the last stair when going down, it occurred to us that pumpkin pie should be added to the pharmacopœia.—*New England Medical Monthly.*

—Surgeon-General Hamilton says that Key West could be a terrestrial paradise if the inhabitants so willed it, and would perfect its hygiene, raze its hovels and build better dwellings. The island is a coral rock, crowned by royal palms, bathed in sunshine, and fanned by the sea-breezes and steady trade winds. In a region of perpetual summer its atmosphere is always balmy.

—Wife (affectionately): "How is your rheumatism this morning, John, dear?"

Husband: "Pretty bad, my dear; pretty bad."

Wife: "Why don't you try the mind cure?"

Husband: "There ain't anything the matter with my mind. It's my joints, dear—my joints.'—*The Medical Summary.*

—Dr. Gram, of Copenhagen, has introduced a new combination of theobromine under the name of dimetin which is very pleasant to take and acts directly upon the kidneys—without any special action on the heart or nervous system.

—A dermatologist, being seated by a lady unknown to him, at dinner, when conversation lagged, remarked interestedly: "Have you noticed the spots on that man's face across the table?" To which she indignantly replied: "Excuse me, sir; that is my husband!" The skin man, being a Briton, and so never to be crushed by circumstances, most enthusiastically said: "Ah! that *is* fortunate; then *you* can tell me whether he is spotted like that all over, *cawn't* you."

—The *Tribune* says a man died without medical assistance at 4 Rivington St.

—The clinical service at Vienna is said to be seriously embarrassed by the great number of students, native and foreign, and by the enormous increase of patients for consultation.

—A letter from Lima, Peru, says that considerable sensation has been caused there by the presence of a Mexican medical man, Dr. Castellaos, who is alleged to possess some wonderful secret for diagnosing and expelling tape worms. He has performed many successful operations, and his receipts are nearly a thousand silver soles a day. By observation of the patient's eyes he discovers the presence of the worm and accurately estimates its dimensions. The leading local physicians regard him as a charlatan, and talk of punishing him for practising without a license. From Lima, Dr. Castellanos proceeds to Chili, and from there to Paris, where, it is reported, he will compete for the great medical prize of 300,000 francs, won a year ago by Pasteur.

—Castor oil applied to stings of bees or bites of insects antidotes the poison and allays pain.

—It is believed that if a scarlet fever patient be sponged with some strong antiseptic solution from the beginning to the end of the desquamation, contagion will be prevented. This is very important if true. Sanitar jelly is the best agent for this purpose.

—A. Graham Bell, of Washington, D. C., says that deaf mutes are increasing in America in a greater proportion than the population at large. He believes a great evil comes from the association of these afflicted ones in educational institutions, where they become acquainted and intermarry. The laws of heredity influence the progeny of these people until, he thinks, there will yet be a distinct variety of the human race in America, devoid of the powers of speech and hearing.

—The bolo flower, discovered by Dr. Schadenberg growing upon a volcanic mountain in one of the Philippine Islands, is perhaps the largest flower in existence, being as large as a carriage-wheel, or, to be more precise, about three feet in diameter and twenty-two pounds in weight. The proper name of the plant is *rafflesia schadenbergia.* The flower has five oval and creamy-white petals, which grows around a centre filled with countless long violet-hued stamens.

—India ink, stated to be identical with the genuine, is prepared by Piffard (*Chem. News*) by treating camphor with concentrated sulphuric acid for twenty-four hours. The resultant gelatinous, reddish mass is then thoroughly heated to drive off the excess of camphor and acid. A black pigment remains which seems to dissolve in water, and produces a permanent reliable ink.

—Use none of the oatmeal preparations that, according to their advertisements, "can be prepared in three to five minutes." They are mostly oats with the hulls removed, and chemically prepared. They are very unwholesome. Cook oatmeal thoroughly and a long time.

—The fact that the bacillus of putrefaction is destructive to other forms of microbes, is said to do away with the generally accepted theory that infection from the air and water of cemeteries is to be dreaded. According to the *National Druggist*, Esmarch concludes after thorough examination, that no form of pathogenic microbe now known, survives for any length of time in the dead body, and the more active the putrefaction, the shorter the survival of the microbe.

—It has been decided to found a dermatological society in Vienna. A meeting with that object was held February 6, under the presidency of Professor Kaposi, and the rules of the new society were approved. The meetings will be held once a fortnight